PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION REPORT
FOR
J & M PLATING
1711 SEMINARY STREET
ROCKFORD, ILLINOIS
EPA I.D. NO. ILD990783995

Submitted to:

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I. EXECUTIVE SUMMARY

The RCRA Facility Assessment (RFA) is the first step in implementing the corrective action provisions of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). The purpose of the RFA is to identify environmental releases or potential releases from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) that may require corrective action by the facility owner. A Preliminary Assessment/Visual Site Inspection (PA/VSI) is a form of an RFA suitable for implementing the corrective action provisions of HSWA. This PA/VSI Report constitutes the reporting requirement for the RFA at the J & M Plating facility in Rockford, Illinois.

A Preliminary Assessment (PA) of the available State of Illinois file materials was conducted to familiarize the TechLaw, Inc. (TechLaw) Team with past compliance history, evidence of past releases, potential migration pathways, potential for exposure to any released hazardous constituents, closure methods and dates, citizen complaints, manufacturing processes and waste management practices at the J & M Plating facility. These file materials were relied upon to present the vast majority of the information in this report. A Visual Site Inspection (VSI) was conducted on November 5, 1997 by the TechLaw Team to identify and characterize SWMUs and AOCs. Additional file material was provided to the TechLaw Team during the VSI by Mr. Ron Roling, Controller, J & M Plating. Photographs were taken during the VSI and are included in Appendix A. Photocopies of the VSI Field Notebooks are included in Appendix B, and various maps and tables showing SWMU locations are presented in Appendix C. Facility topography data and soil sampling results are included in Appendix D.

A total of nine SWMUs and no AOCs were identified and are described in more detail in Section III of this report. The unit still in operation at the time of the VSI, the Current Wastewater Pre-Treatment System (SMWU 6), was found to have no history or evidence of release. The release potential for this unit is low. The Former Clarifier Sludge Storage Unit (SWMU 1) and the Former Waste Paint Storage Area (SWMU 2) received RCRA clean closure approval in 1996 from IEPA, and the release potential for these units is low. The Former Plating Waste Storage Area (SWMU 3) was also RCRA clean closed in 1996 but had some failure in its release control structure. Therefore the release potential for this unit is moderate.

SWMU 5 is the Former Underground Tank Farm. All of the underground storage tanks (USTs) were reportedly emptied of their waste and filled with inert material in 1985, with the exception of one. No soil sampling was performed for any of these USTs in 1985. The one UST that was left in place in 1985 was emptied in 1991, and subsurface soil samples were collected at the base of the tank. Sample results revealed the presence of several metals and thus SWMU 5 has a high potential for past release.

The Former Facility Wide Drum Storage Area (SWMU 4) is no longer in use but the substantial amount of hazardous waste which was stored (over 1,400 drums), the uncovered/uncontained condition of the outdoor storage surfaces on which the drums were placed, and many instances of

recorded release indicates there was a high potential for release while the unit was in use. SWMU 4 underwent an immediate removal action in 1985, under Superfund authority.

Waste was illegally dumped into the Seminary Street Storm Drain Dump Area (SWMU 7) until 1983, when Alloy Plating (who then occupied the J & M Plating facility) agreed to cease this practice. Waste was also illegally dumped onto the soil at the J & M Plating facility, and this waste migrated to an adjacent property owned by Camcar. This unit is identified in the report as the Camcar Property Dumping Site (SWMU 9). The potential for release from both of these units is considered high since the waste contained high concentrations of metals and cyanide and there is no indication that any cleanup took place at either SWMU 7 or SWMU 9.

An empty 5,000 Gallon Acid Storage Tank (SWMU 8) is situated on top of a stained concrete block base. The base is highly stained and deteriorated, which are indications that releases may have occurred in the past. For this reason, the potential for release from SWMU 8 is considered high.

Section II of this report describes the site and includes regulation history, releases and environmental setting. Section III describes the SWMUs on the site. Section IV addresses Areas of Concern. Conclusions are presented in Section V and References are listed in Section VI.

II. SITE DESCRIPTION

The J & M Plating facility is located at 1711 Seminary Street, in an industrial area in the town of Rockford, Illinois which is located in Winnebago County. According to a February 19, 1992 Site Map, the facility is bordered by Seminary Street to the east and Magnolia Street to the west. This location was verified during the VSI.

The J & M Plating facility began operating April 2, 1974 and has changed owners twice since operations began. Duane and Robert Dickson of Alloy Plating owned and operated the facility from 1974 to March 1985, at which time it was purchased by Fascote, Inc. Fascote, Inc. operated at the facility until June 1988, when it was sold to J & M Plating. J & M Plating currently owns the facility. Information concerning site use/owners prior to 1974 was not found in the file materials and was not known by the facility representative. These dates of ownership and operation were found in the following documents: November 18, 1980, Hazardous Waste Permit Application for Interim Status for the Treatment and Storage of Hazardous Waste submitted to U.S. EPA by Alloy Plating; RCRA Inspection Report prepared by R. L. Munger dated April 22, 1985; and, a July 5, 1988 letter addressed to Lawrence Eastep, IEPA from Michael Pettineo of Browning Ferris Industries of Illinois, Inc.

According to a September 15, 1992 J & M Plating Detail Plan Map, the facility covers approximately 70,500 square feet and includes two buildings, the main building and the storage building. The main building (18,422 square foot area) contains the electroplating operations and the Current Wastewater Pre-Treatment System (SWMU 6). The storage building (10,400 square foot area) was the site of the Former Clarifier Sludge Storage Unit (SWMU 1) and the Former Waste Paint Storage Area (SWMU 2) but is not currently in use. Between these buildings is a concrete/asphalt paved area which is bordered on the west and east sides by a fence. This fence remains closed and locked during nights and weekends but remains open during normal business hours.

According to Ron Roling of J & M Plating, currently, the only process J&M Plating performs is zinc electroplating on carbon steel using zinc and acids. Acidic waste water is generated as a result of zinc electroplating and is treated by the Current Wastewater Pre-Treatment System (SWMU 6). SWMU 6 removes nonhazardous sludge from the acidic waste water. The sludge is stored in SWMU 1 and is removed every two (2) weeks and shipped to the BFI Landfill in Mallard Lake, Illinois. The Current Wastewater Pre-Treatment System (SWMU 6) has had several upgrades since 1989. According to the April 22, 1992 Document titled "Post Evaluation Inspection Remarks", the company has a special wastestream permit based on the exemption for wastewater treatment sludge from electroplating zinc on carbon steel.

During a 1992 IEPA inspection, J & M Plating was performing zinc electroplating, chrome brightening, and phosphating on steel parts. Site operations during the 1980s and late 1970s

included those performed in 1992 as well as some painting and experimental plating projects. During this time a larger range of chemicals were used in plating operations (including cadmium/cyanide plating solutions and clarifier sludge). Operations in 1980 included the finishing of fastener hardware with a phosphate coating or with electroplated finishes of cadmium or zinc. According to a Hazardous Waste Permit Application for Interim Status for the Treatment and Storage of Hazardous Waste dated November 18, 1980, the following hazardous wastes were produced during 1980: F006, F007, F008, K054, D001 and D002. IEPA Generator Annual Hazardous Waste Reports for 1983 and 1988 indicate the generation of only F006 waste. The Reports for 1989 and 1990 indicate the production of no hazardous waste. No further waste generation reports are present in the available files.

Map 1 in Appendix C, shows the past operation layout for the facility. The waste resulting from electroplating operations conducted in the past was stored in the Former Clarifier Sludge Storage Unit (SWMU 1), the Former Plating Waste Drum Storage Area (SWMU 3), the Former Facility Wide Drum Storage Areas (SWMU 4) and the Former Underground Tank Farm (SWMU 5). The dates of installation, construction materials and specific wastes stored in SWMU 5 are not known, with the exception of one tank which was found to contain a cadmium/cyanide solution. The Former Waste Paint Storage Area (SWMU 2) stored waste from a short term painting project. All of these units are no longer in use.

SWMUs 1, 2 and 3 underwent RCRA clean closure in 1996 under the direction of IEPA. SWMUs 4 and 5 underwent an Immediate Removal Action in 1985 under the direction of IEPA. SWMU 1 currently stores nonhazardous particulate sludge which is generated by the Current Waste water Pre-Treatment System (SWMU 6). The Seminary Street Dump Area (SWMU 7) and the Camcar Property Dump Site (SWMU 9) received illegally dumped waste from the J & M Plating facility and there is no indication that any cleanup has taken place at either location. The 5,000 Gallon Acid Storage Tank (SWMU 8), located outdoors, was used for the storage of product. The J&M Plating representative indicated that SWMU 8 has not been used in the last decade.

Regulatory History

On November 18, 1980, Alloy Plating (Former J & M Plating facility owner) submitted a Hazardous Waste Permit Application for Interim Status for the Treatment and Storage of Hazardous Waste and a notification of hazardous waste activity to U.S. EPA, to request status as a treatment, storage and disposal (TSD) facility. The Application states that annually, the facility generated the following quantities of waste from the following processes:

- 250,000,000 pounds of F006 waste (process codes S01 and D30)
- 45,000,000 pounds of F007 waste (process codes S02, T01, S01 and D80)
- 9,000,000 pounds of F008 waste (process codes S02, T01, S01, D80).

On March 12, 1981, Duane Dickson of Alloy Plating addressed a letter to U.S. EPA Region 5. Dickson withdrew the request for a Interim Status for the Treatment and Storage of Hazardous Waste and stated that hazardous waste would not be stored at the facility for a period exceeding 90 days.

A 1982 IEPA Generator Annual Hazardous Waste Report states that 15,756 gallons of electroplating wastewater treatment sludge (F006) was generated at the facility during 1982. No other wastes were identified in this report. This report was submitted by Orville Solfest, who was (according to the report) the plant manager of Alloy Plating.

On August 23, 1983 an IEPA RCRA inspection was performed. The Inspection Report lists the following violations:

- hazardous waste containers were not marked
- no regular inspection of waste storage areas
- no contingency plan
- no emergency response plan
- incomplete personnel training records
- no emergency equipment.

On August 31, 1983, a Compliance Inquiry Letter was sent to Duane Dickson of Alloy Plating from Robert Wengrow, IEPA-Division of Land Pollution Control (DLPC) concerning the violations discovered during the August 23, 1983 inspection. According to a February 1985 IEPA Enforcement Brochure, there was no facility response to this letter.

According to the February 1985 IEPA Enforcement Brochure, on October 5, 1983, an inspection of the Current Wastewater Pre-Treatment System (SWMU 6) was conducted by the IEPA-Division of Water Pollution Control (DWPC). During this inspection it was discovered that the facility did not have a permit for SWMU 6. The facility was provided a permit application but declined to complete and submit it.

According to a document titled Legal File: Alloy Plating - Chronology of Events, there was a joint inspection conducted by the Rockford Sanitary District and IEPA-DWPC on October 12, 1983. On November 3, 1983 a follow-up inspection was conducted by IEPA-DWPC and samples were collected from the Seminary Street Storm Drain Dump Area (SWMU 7). Evidence of unpermitted discharge of sludge into the storm drain was noted during this follow-up inspection (the nature of this evidence, visual, odor, et cetera, was not stated). On November 8, 1983, a Compliance Inquiry Letter was sent to Alloy Plating from the IEPA-DWPC. The contents of this letter were not noted and the letter was not present in the facility file.

According to the February 1985 IEPA Enforcement Brochure, Alloy Plating performed the following actions: The facility was discovered discharging waste materials into the Seminary Street Storm Drain Dump Area (SWMU 7) no fewer than eight (8) times between the dates November 3, 1983 to April 12, 1984. According to the enforcement brochure: "this was done by washing or depositing waste into a storm grate on the parking lot on the northeast side of [Alloy Plating's] main building. [This drain eventually] leads to the storm sewer which runs under the middle of Seminary Street [and] discharges into the Rock River in Blackhawk Park" resulting in a point source discharge of contaminants. These unpermitted discharges were sampled on no fewer than seven (7) occasions between November 3, 1983 to April 12, 1984 by IEPA, and high levels of TSS, cyanide, cadmium, copper, chromium, iron and zinc were found. It was also determined during this time period that Alloy Plating had six unpermitted air emission locations within their facility.

On November 14, 1983, Alloy responded to the November 8, 1983, Compliance Inquiry Letter and agreed to cease discharging into the Seminary Street Storm Drain Dump Area (SWMU 7).

On November 23, 1983, IEPA-DLPC sent a Pre-Enforcement Conference Letter to Alloy Plating. The letter stated that the purpose of the conference was to resolve the violations discovered during the August 23, 1983 RCRA inspection. The conference took place on December 5, 1983. There was no account in the file of what took place at the conference.

In a December 12, 1983 letter from Robert Dickson, Alloy Plating representatives stated that measures were being taken to prevent further dumping into the Storm Drain (SWMU 7) and stated their intention to gain waste treatment system operator certification for certain employees. The letter also included job descriptions and a contingency plan.

A December 15, 1983 letter from IEPA, identifies the following shortcomings in Alloy Plating's contingency plan; information missing from job descriptions: the facility's lack of air pollution permits; and concerns about potential release of waste to the Storm Drain (SWMU 7). The letter also requests additional information from Alloy Plating.

In a January 3, 1984, letter, Alloy Plating, supplied the information requested in the December 15, 1983 letter. IEPA replied in a January 17, 1984, letter, that the responses were inadequate and there were still violations persisting at the facility. The letter stated the following complaints

from the following divisions: the Division of Air Pollution Control stated that the facility was in violation of emission standards and was operating without a permit; DLPC stated that the training program for personnel was incomplete, a more detailed contingency plan was necessary, and that more detailed job descriptions were required; and the DWPC stated that storm water discharge to the drain at the Seminary Street Storm Drain Dump Area (SWMU 7) had been sampled on December 7, 1983 and analysis "showed continuous contamination." IEPA-DWPC stated that unpermitted discharges must cease.

On February 2, 1984, Alloy Plating informed IEPA that during the week of January 23, 1984 the facility rinsed the storm drain in their parking lot for 4 to 5 hours per day for several days in order to flush out any old contaminants. On January 30 and 31, 1984 grab samples of man-hole water were collected by the facility showing cadmium, zinc and cyanide at levels all below 1.2 mg/l. Dickson stated that the facility would continue to monitor the man-hole water with daily samples to comply with IEPA DWPC's complaint.

On February 8, 1984 IEPA-DLPC received a submittal from Alloy Plating containing a revised contingency plan, information on employee training, and additional job descriptions. On March 1, 1984, Alloy Plating submitted an IEPA General Annual Hazardous Waste Report for 1983 which indicated that Alloy Plating had generated 167,256 gallons of F006 waste from the treatment of sludges from electroplating operations.

According to the document titled Legal File: Alloy Plating - Chronology of Events, on March 9, 1984 at 4:00 a.m. the police dispatcher in the adjacent community of Loves Park informed the IEPA Emergency Response Unit that Kenneth Domin (an employee of Alloy Plating) had been caught dumping barrels of waste into a drain located at the King Car Wash. While committing this act, his truck, containing many barrels of waste, fell through a wooden grate and was immobilized. Both IEPA and the Rockford Sanitary District took legal action against Alloy Plating, this action is further detailed later in this section.

According to IEPA Special Analysis Forms dated March 9 through 21, 1984, the waste being dumped into the King Car Wash drain during this incident was found to contain high levels barium, cadmium, chromium, cyanide, iron, manganese, nickel, and possessed extreme pH.

According to the document titled Legal File: Alloy Plating - Chronology of Events, on March 10, 1984 an Alloy Plating employee told the police that waste from the Alloy Plating facility had also been dumped down a well at the Rockford Cylinder Gas warehouse. On March 15, 1984, the floor drain at Rockford Cylinder Gas was sampled and the results indicate that the pH was 11.3 and the following chemicals were detected: barium (0.2 ppm), cadmium (0.51 ppm), chromium (0.58 ppm), cyanide (2.0 ppm) and lead (0.19).

According to the February 1985 IEPA Enforcement Brochure, a March 28, 1984 IEPA- DWPC inspection revealed evidence of openly dumping "blue sludge like waste" onto the soil at the southwest corner of the main (operations) building. The inspection revealed that the dumped

waste flowed south onto the Camcar Property Dumping Site (SWMU 9) bordering Alloy and then west towards a concrete storm drain. It is not known when the dumping actually took place as it was not discovered until the snow melted.

According to the February 1985 IEPA Enforcement Brochure the dumping at the Camcar property violated Section 12(d), 21(f)(1) and 21(a) of the Illinois Environmental Protection Act and presented a public health hazard. The soil of the Camcar Property Dumping Site (SWMU 9) was sampled by IEPA and contaminants (including cadmium and cyanide) were found at very high levels. The results of this sampling are detailed in the Release History (below) and SWMU Discussion (Section III).

The February 1985 IEPA Enforcement Brochure explains that as a result of the King Car Wash dumping incident "Criminal action was initiated, and since that date, contact with [Alloy Plating] has been curtailed so as not to prejudice the action. As a result, [Alloy Plating] has not been directly confronted regarding the...dumping onto Camcar property, [SWMU 9]." Although the February 1985 Enforcement Brochure calls for IEPA enforcement action, there is no indication that the Camcar Property Dumping Site (SWMU 9) was ever cleaned up.

According to the Legal File: Alloy Plating - Chronology of Events, on April 6, 1984 the Rockford Sanitary District, filed suit against Alloy Plating for discharging high levels of cyanide, cadmium and zinc into the sewer. On April 11, 1984 Alloy Plating was indicted on charges of violating the Illinois Environmental Protection Act. The charges included Calculated Criminal Disposal of Hazardous Waste, Unauthorized Use of Hazardous Waste, Reckless Disposal of Hazardous Waste, and Conspiracy.

On April 18, 1984 IEPA sent investigative reports concerning the King Car Wash incident to State of Illinois Assistant Attorney General, requesting review of the case for possible criminal action.

According to the Legal File: Alloy Plating - Chronology of Events, the following events took place: On April 20, 1984 Alloy Plating and one of it's employees were arraigned. On May 6, 1984 there was a civil referral to the Office of the Attorney General for the following acts:

- March 28, 1984: Open dumping of sludge on property bordering Alloy Plating
- November 3, 1984 through November 28, 1984: Discharge without a NPDES permit
- November 1983 through March 1984: Effluent violations
- November 1983 through March 1984: Disposal of hazardous waste into a storm sewer without a RCRA permit
- August 23, 1983 through February 2, 1984: Storing hazardous waste without a RCRA permit
- October 5, 1983 through early 1985: Operating a pre-treatment system without a permit
- October 24, 1983 through early 1985: Operating an air emission source without a permit

On August 16, 1984; the Illinois Attorney General Office informed IEPA that it would represent them.

As a result of the July 2, 1984, RCRA inspection IEPA sent a letter to Alloy Plating on August 3, 1984, concerning violations noted during the inspection, including the following:

- Manifests for all waste shipments are not on file.
- A contingency plan was not on file.
- Hazardous waste containers were not marked and dated correctly.
- Plating sludge was spilled on the floor.
- Hazardous waste containers were left open.
- Unsafe cleanup procedures.
- No records of weekly inspection of the container storage area.

IEPA requested that these violations be corrected.

According to the Legal File: Alloy Plating - Chronology of Events, on October 24, 1984 the case of Rockford Sanitary District v. Alloy was decided. The court levied a fine of $158,500 plus attorney fees. On February 4, 1985 Rockford Sanitary District levied against Alloy Plating as the facility did not pay the fine and failed to file an appeal bond when it appealed the judgement. Also on this date, the Illinois National Bank and Trust, Alloy Plating's mortgage holder, scheduled a Trial for Right of Property to determine ownership of the property and priority of liens.

According to IEPA Memorandums addressed to the Division File dated February 14, 1985 and February 15, 1985; the following activities occurred: On February 4, 1985, IEPA visited the Alloy Plating site at the request of the Winnebago County Sheriffs Department (the Sheriff had seized the facility because Alloy Plating had not paid fines owed to the Rockford Sanitary District). IEPA reported that there were stacks of unlabeled, 55 gallon drums in poor condition indoors and outdoors both on concrete surfaces and uncovered soil. IEPA also noted that the facility had two presses on the site. One of these presses was located in a room with plating vats and heat treating furnaces. In this room, between the aisle and the wall there was a puddle one inch deep of "dark brown liquid." A dike of "oil dry", an absorbent, kept this liquid out of the aisle. Spilled sludge on the floor was noted in the loading dock area. Waste was also seen leaking onto the concrete out of a trailer containing approximately 40 drums. The leaking material was within 50 feet of a public sidewalk.

According to the Legal File: Alloy Plating - Chronology of Events, the following activities occurred: On February 5, 1985, $4,117 from the Hazardous Waste Fund was spent to dispose of the drums seized at the King Car Wash under the direction of IEPA. On February 6, 1985, six samples were taken by IEPA from the drums stored at the Alloy Plating facility. These samples

showed the presence of cyanide (concentrations were not noted). On February 8, 1985 the IEPA decided to proceed with State Superfund action and informed Alloy Plating of this by notice on February 13, 1985.

According to an IEPA Memorandum addressed to the Division File, on February 11, 1985, several IEPA employees observed a greenish yellow stain on the snow in the yard where the barrels and trucks were stored at the Alloy Plating facility. The yellow liquid which created this stain was field screened by IEPA for cyanide and it tested positive, according to the IEPA Memorandum.

According to the Legal File: Alloy Plating - Chronology of Events, on February 19, 1985 the State of Illinois Attorney General's Office obtained a search warrant and a meeting was held for the cleanup of the Alloy Plating facility. The participants in this meeting were not noted. The number of drums present at the facility was estimated at 1,350. Also on this day, the Rockford Sanitary District and Alloy Plating settled their pending appeal. Their agreement included a $27,000 fine, the payment of several utility bills and assistance in cleanup activities (these were not specified).

According to the Legal File: Alloy Plating - Chronology of Events, the following activities occurred: On February 20, 1985 the Rockford Sanitary District released its levy and Alloy Plating regained possession of the property. On February 27, 1985, following this repossession, Alloy Plating informed IEPA of its plans to sell the facility site.

A February 26, 1985, Mid America Inc. Proposal for the removal and cleaning of several SWMUs at the Alloy Plating facility was received at IEPA Division of Land Pollution Control on February 27, 1985. This proposal was never mentioned again in the file materials. It is not known whether it was approved or implemented. The work plan proposed the following: Four drums containing high or low pH solutions were to be treated in holding tanks in the courtyard outside the facility. Several drums, tanks and vats containing cyanide were to be treated with sodium hypochlorite or formaldehyde. The contents of remaining drums were to be removed for off-site treatment. The concrete floor on which the drums were stored was to be washed with an alkaline spray (with the rinse being collected and transported off-site for treatment). The vats and tanks were to be removed for offsite treatment and the drums were to be shredded and stored outdoors. It is not known whether this work was performed.

In a March 4, 1985 letter to IEPA, Alloy Plating submitted a response to the Superfund notice of February 13, 1985. IEPA contacted an Alloy Plating representative and pointed out the following deficiencies in the response:

- Testing of aboveground and underground storage tanks was not included.
- Transportation needs for the removal of certain types of waste were not addressed.
- The disposal of empty drums after waste removal was not sufficiently addressed.

- The proposed plan had many potential hazards to cleanup workers which were not addressed.

Alloy Plating replied to these deficiencies in the March 4, 1985 letter, stating that Alloy Plating did not object to testing of the underground tanks and that a facility had been found which would dispose of the empty drums. It was also stated that the waste transportation and potential hazards to cleanup worker deficiencies were insubstantial and that IEPA was "reaching to find potential hazards which can be solved in a very practical manner."

On March 11, 1985, IEPA forwarded a letter to Alloy Plating stating that IEPA had received Alloy's "Response to Notice to Parties Liable for a Release Under Ch. 111 ½, Ill. Rev. Stat. §1022.2(f)." Alloy's response did not include an agreement to perform all of the identified response actions and was therefore deemed a refusal. The deficiencies in the response included:

- Alloy did not agree to remove or clean the drums on-site.
- Alloy did not agree to analyze the material in all vats and tanks at the site.
- Alloy did not state that they would dispose of "unusable" material.
- Alloy's statements contradicted Mr. Taylor's (potential purchaser of the facility) concerning the use of remaining product.
- Alloy's site safety plan was not acceptable.

On April 18, 1985 IEPA forwarded a Compliance Inquiry Letter to Alloy Plating stating that the company was in violation as they had not submitted their 1984 Annual Hazardous Waste Report to IEPA.

According to an April 22, 1998 RCRA Inspection Report during March, 1985 Alloy Plating was forced out of business due to unpaid Rockford Sanitary District fines and other debts. Fascote, Inc. (Fascote) purchased the property and assumed responsibility for the clean up required by IEPA with daily supervision by IEPA. On March 29, 1985, Fascote assumed Alloy Plating's EPA Identification number. According to a March 19, 1985 IEPA Memorandum addressed to the Division File, S.E.T. Liquid Waste Systems (SET) started clean up work on March 13, 1985 at the J&M Plating facility which at this time was owned by Fascote.

The following activities took place between March 16, 1985 and April 12, 1985: There was considerable discussion between Fascote and IEPA over the cleanup plan concerning the testing of underground and above ground tanks and other issues. The waste characteristics of the drummed material was determined and drums were staged according to these characteristics. It was determined that most of the drummed waste contained cyanide with low and high pH characteristics. One bottle of thorium nitrate was found, which was removed by the Nuclear Regulatory Commission. Several underground storage tanks at the Former Underground Tank Farm (SWMU 5) were pumped out. The contents of these and the contents of several clarifiers were sent to either Envirite or Chem-Clear.

According to an April 24, 1985 IEPA Memorandum to the Division File, a total of 1,445 drums had been tested for pH, free cyanide, complex cyanide and iron. Drum segregation had also been completed by this date. A May 2, 1985 IEPA Memorandum to the Division File that on April 25, 1985, PDC Response, Inc. (PDC) received an experimental permit (it is not stated who issued this permit) to perform an on-site alkalization process. The May 2, 1985 Memorandum further states that a meeting was held on April 30, 1985 with PDC, SET, Fascote and IEPA in attendance. The safety plan, management and schedule of the on-site alkalization process was determined at this meeting.

A May 23, 1985 IEPA Memorandum to the Division File indicates that on May 9, 1985 an on site alkalization process was initiated under the direction of PDC in order to treat the contents of 715 drums of waste contain low pH, and cyanide. After treatment and removal of the wastes, empty drums were rinsed with high pressure steam. Metal drums were sent to a special waste landfill site and plastic drums were sent to a drum recycle. On May 13, 1985 Service Master began the cleanup of the facility building floor, plating equipment and empty drums. Rinse water was sent to Chem-Clear.

According to a July 3, 1985 IEPA Memorandum to the Division File, the alkalization project was finished on June 6, 1985. By this time all liquid waste had been transported off-site. The solid waste had been moved to the maintenance building. The plating tanks had been rinsed, cleaned and painted. The floor in the main building had been rinsed with high pressure steam. The two southern rooms have had new concrete (flooring) poured into them since the time of the cleaning.

By October 1985, all but one of the fifteen underground tanks of the Former Underground Tank Farm (SWMU 5) had been emptied and filled with cement. One underground storage tank had been left below the cadmium plating line, reportedly unfilled.

According to an October 16, 1985 RCRA Inspection Report, IEPA performed a RCRA inspection of the Fascote facility on October 16, 1985. It was found that four semi-trailers of drummed hazardous waste from Alloy Plating operations remained on the property. It was determined that this waste was from previous remediation by the facility during the summer of 1985. It was also noted that the trailer doors were open and that there was improper labeling of drums. There was still some product (this may have been the plating solution eventually stored in SWMU 3) stored on site (Fascote intended to use it in future operations). At the time of this inspection, the facility had four steel plating processes in operation, none of which generated hazardous waste.

An October 30, 1985 letter from Fascote to IEPA states that the on-site storage of salvaged cadmium plating solution leftover from the Alloy Plating operations was permissible as it was considered a product (not a hazardous waste). The letter also stated that SET, who was performing remediation under Fascote, had contracted with a company to remove all the empty drums from the site. The letter continues, stating that the first two truckloads of empty drums were removed on October 29, 1985.

On November 1, 1985 IEPA a compliance inquiry letter to Fascote, which identified several violations of requirements of the Illinois Administrative Code including improper storage of waste, job descriptions, and other paperwork violations. According to a January 30, 1986 follow-up letter to Fascote from IEPA, the violations have been resolved and a follow-up inspection was not required.

According to an January 22, 1986 IEPA Memorandum, an IEPA inspector visited the Fascote site on January 14, 1986 to determine the progress of the clean-up. This inspection revealed that during remedtion SET had discovered sludge under the old cadmium plating line and had identified a 1,600 gallon underground storage tank (UST) was discovered under the rectifier on-site. The cadmium containing sludge was subsequently removed and sent off-site. The UST contained cadmium and cyanide contaminated sludge and, at the time, the facility was working with SET concerning the removal of it. Excluding these, all hazardous waste generated by Alloy Plating had been removed along with all metal and plastic drums, according to the IEPA Memorandum.

A July 17, 1986 Rockford Register Star article titled "Alloy Plating Co. Fined $600,000" indicates that on July 16, 1986, Alloy was fined $600,000 and the former plant manager, John Boyce, was sentenced to three years in prison as a result of the King Car Wash chemical dumping incident of 1984. Testimony during the trial revealed that Alloy had failed to pay the fine of $158,000 levied after being convicted of 317 counts of violating Rockford Sanitary District regulations. According the article, Duane and Robert Dixon, Alloy's owners, were not present during the former hearing and were never personally charged in connection with the dumping incident.

According to a July 5, 1988 letter addressed to Lawrence Eastep of IEPA from Browning Ferris Industries of Illinois, Inc. Fascote entered an agreement to be purchased by J & M Plating on June 21, 1988.

According to Fascote's 1988 IEPA Generator Annual Hazardous Waste Report dated February 28, 1989, 24,240 gallons of F006 waste had generated and shipped off-site. The 1989 IEPA Generator Hazardous Waste Report completed by Ronald Roling, Controller, J&M Plating, reported no waste was generated at the facility. The 1990 IEPA Generator Annual Hazardous Waste Report also reported no waste was generated at the facility.

On October 28, 1991 Ron Roling, of J & M Plating signed a Leaking Underground Storage Tank Program 20 Day Certification document confirming that he is the owner and operator of an UST system from which a release was reported. The release came from the one UST, which was part of the Former Underground Tank Farm (SWMU 5), that had not yet been closed. According to a February 12, 1992 Facsimile Message titled "Analysis of Floor Pit,"sent to J & M Plating from C & L Equipment, sludge from the Alloy Plating operation still remained within the UST (with cyanide levels as high as 6,800 ppm).

On April 21, 1992, a RCRA Compliance Evaluation Inspection (CEI) was conducted at the J & M Plating facility. The document states that J & M Plating was regulated as a Conditionally Exempt Small Quantity Generator and as a G5 (designating that the facility stored hazardous waste in containers longer than 90 days without a permit). Further, this inspection noted that there were several units in operation that managed hazardous waste. The units included the Former Plating Waste Drum Storage Area (SWMU 3), containing 31 drums of cadmium/cyanide plating solution (after being stored for several years IEPA determined that this was waste, as discussed later in the section). the Former Clarifier Sludge Storage Unit (SWMU 1), containing 1000 gallons of clarifier sludge, and one 1,600 gallon UST (part of SWMU 5). The inspection also noted the wastes and annual quantities generated at the facility, including: 250 gallons of solvent/wax dip (F003, F005, D001), approximately 173 cubic yards of zinc waste treatment sludge (non hazardous as noted by the IEPA inspector), and 1350 gallons of hydraulic oil (D001).

The April 21, 1992 IEPA Post Evaluation Inspection Remarks for the RCRA CEI also noted waste that was generated in the past, including 385 gallons of paint waste (F003, F005, D001) resulting from a painting project. These wastes were shipped to Clayton Chemical on April 21, 1992. Also, on December 11, 1990, 1,000 gallons of waste acetone/hydraulic oil was delivered to Environmental Waste Services. Electroplating liquid (D002) was used for a short time and was shipped from J & M Plating back to the supplier, Hydrite Chemical. The April 21, 1992 inspection revealed many violations including conducting hazardous waste storage without a RCRA permit. J & M Plating was informed of these violations in a June 22, 1992 IEPA letter.

On April 30, 1992, a 45 Day Report for J & M Plating, prepared by the Environmental Technical Assistance Company, was submitted to the IEPA Leaking Underground Storage Tank Program. In the Report, J & M Plating stated several reasons why the removal of the UST in question was impractical. First, it was located beneath the floor of an actively utilized building making extensive remediation impossible. Second, there was insufficient space between existing concrete foundation footings, which were used as support trusses, and the existing tanks to drive in footings. Third, there was no practical method to rig pulleys to extract the tank and the tank could not be cut up as it would violate OSHA regulations on tank removal. The Report also indicated that internal tank cleaning was conducted by Tank and Industrial Cleaning Service and consisted of removing all materials within the tank, processing those materials through J & M Plating's Current Wastewaster Pre-Treatment System (SWMU 6), scrubbing the UST with trisodium phosphate and triple rinsing with high pressure water and processing rinse water through the J & M Plating Current Wastewater Pre-Treatment system (SWMU 6). This work was completed on September 9, 1991.

The 45 Day Report also indicated that soil sampling was conducted by the facility on October 2, 1991. This was performed by boring through the east and west walls at the base of the UST and removing a quart size jar of soil which was analyzed and determined to contain cadmium at TCLP 2.6 mg/L which is greater than the cadmium regulatory threshold of 1 mg/L. Table 2 in Appendix D contains the sample results.

In about September 1992, a representative of J & M Plating reviewed IEPA files to determine if any soil testing data existed from the 1985 to 1986 period. In a December 9, 1992 letter addressed to Mary Canterbury, IEPA from the representative of J & M Plating, it is stated that "[i]t was ultimately determined that [IEPA] had not determined that it was not necessary in the 1985-1986 time period to conduct any testing of soils in and around the facility."

On December 14, 1992, Fehr-Graham and Associates, J & M Plating's contractor, submitted a closure plan for the Former Clarifier Sludge Storage Unit, (SWMU 1), the Former Waste Paint Storage Area (SWMU 2), and the Former Plating Waste Drum Storage Area (SWMU 3) at the facility.

A January 26, 1993 letter addressed to Mark Morris of J & M Plating from Brian White, IEPA informed J & M Plating that they were in compliance having resolved all of the violations revealed in the April 21, 1992 RCRA CEI.

On March 15, 1993 Lawrence Eastep, IEPA forwarded a letter to Fehr Graham and Associates stating that the closure plan for SWMUs 1, 2 and 3 was approved subject to the following conditions and modifications:

- Certification of closure upon completion.
- IEPA must be notified if contamination is detected.
- Health and safety concerns must be addressed.
- Concrete surfaces must be inspected by an independent engineer.
- Soil samples must be taken if concrete surfaces are not intact or evidence of release is found.
- Contaminated soil must be excavated and disposed of off site.
- Alternative remediation actions must be approved by IEPA.

On May 1, 1996 J & M Plating was granted an Operating Permit for Smaller Source by the IEPA Division of Air Pollution Control for the operation of "emission source(s) and/or air pollution control equipment." During the VSI, Ron Roling, J & M Plating, stated that the indoor plumbing of the facility was pulled out during 1996. According to a January 12, 1997 interview with Dennis Priewe of the Rock River Water Reclamation District, J & M Plating's present permit for the operation of the Current Wastewater Pre-Treatment System (SWMU 6) is on file with the District.

According to a March 17, 1997 document regarding J & M Plating which is titled "Narrative," J & M Plating received IEPA approval for closure activities on January 23, 1996 (several years after the closure work was performed) and a Closure Verification Inspection was conducted by IEPA on March 17, 1997. The following three units were closed:

- the Former Clarifier Sludge Storage Unit (SWMU 1) which stored 1,000 gallons of clarifier sludge that was removed and sent to Metro Recovery Systems on July 29, 1992.
- the Former Wastes Paint Storage Area (SWMU 2) which stored paint waste in seven 55 gallon drums that were sent to Clayton Chemical on April 21, 1992.
- the Former Plating Waste Drum Storage Area (SWMU 3) which stored thirty-one 55 gallon drums of cadmium/cyanide plating solution that was sent to Michigan Disposal on June, 17, 1992. Clean closure was demonstrated with wipe samples from each of the units' concrete floors. These units were closed under the same unit numbers and names used for this report.

On October 16, 1997, IEPA forwarded a letter to Ron Roling of J & M Plating in response to the certification of closure of the Former Clarifier Sludge Storage Area, (SWMU 1), the Former Waste Paint Storage Area (SWMU 2), and the Former Plating Waste Drum Storage Area (SWMU 3) at the J & M Plating facility. The letter stated that certification of closure for these units was received by IEPA on August 15, 1996. The letter further stated that: "This certification, signed by Ron Roling, J & M Plating and independent professional engineer, Mark Young indicated that [SWMUs 1, 2 and 3] had been closed in accordance with the closure plan approved by IEPA on January 23, 1996."

Environmental Setting

The J & M Plating facility is located in southwest Rockford, an area of moderate relief, low hills and river valleys. According to a figure entitled "J & M Plating: Figure 3, Detail Plan" produced by Fehr-Graham and Associates dated September 15, 1992, the elevation of the facility ranges between 737 feet and 738 feet above sea level and the facility property slopes slightly to the southeast.

The April 30, 1992, Forty Five (45) Day Report for J & M Plating, indicates that a residential area lies one block to the north of the facility, Seminary Street lies to the east, an industrial plant to the south and Magnolia Street to the west. According to the 1996 Rockford and Vicinity Road Map produced by the Seeger Map company, there is a city park one block to the west and a forest preserve one mile to the west of the facility. The Rock River, the nearest down gradient surface water body, lies approximately 2,000 feet to the west of the facility and, according to representatives at the City of Rockford, Illinois Water Division, the river is not used for drinking water but is designated for recreation and agriculture purposes. FEMA National Flood Insurance Program Panel No. 170723-0020-B, dated June 18, 1982, indicates the facility does not lie within the 100-year flood plane.

According to the 1963 Rainfall Frequency Atlas of the United States, Technical Paper No. 40, and the 1968 Climatic Atlas of the United States, both produced by the U.S. Department of Commerce, the normal annual total precipitation for the Rockford area is thirty-two (32) inches, the one year twenty-four (24) hour rainfall value is two and a half (2.5) inches, and the net precipitation is two (2) inches.

According to the 1984 Illinois Department of Energy and Natural Resources: State Geological Survey Division publication, *Geology for Planning in Boone and Winnebago Counties.*, Berg, R.C., Kempton, J.P. and Stecyk, A.N., Circular 531, and February 15, 1989 IEPA Closure Modification Notes, the facility is underlain by unconsolidated glacial sediments which are, in turn, underlain by sandstone bedrock with some carbonates. The glacial sediments fill the Rock River valley up to a depth of 250 feet and consist of alternating layers of sand/gravel and lacustrine sand, silt and clay. Boring logs for a municipal supply well approximately two miles from the site indicate that the underlying sandstone bedrock extends as deep as 1,500 feet below grade, (the boring completion depth).

According to City of Rockford, Illinois Water Division representatives, there are two aquifers present beneath the J & M Plating facility. The more shallow is an unconfined, unconsolidated sand and gravel aquifer which extends as deep as 250 feet in some areas. The deep aquifer is confined Mt. Simon sandstone which extends to approximately 1,500 feet. The groundwater table is approximately fifteen (15) to twenty-five (25) feet below grade.

To determine the location of groundwater wells in the vicinity of the facility, an information request was submitted to the Illinois State Water Survery (ISWS) which maintains databases for all registered private groundwater wells and all registered public, industrial, and commercial wells known as PICS wells. In the State of Illinois, groundwater wells with less than 25 users or with yields of less than 75 gallons per minute are registered as private wells, while wells with greater than 25 users or with yields of greater than 75 gallons per minute are registered as PICS wells.

The ISWS information request identified 14 PICS wells within one-mile of the facility which are currently registered as being in-use and with most depths ranging from 250 to 600 feet. The ISWS information request identified nine, private, domestic-use wells within one-half mile of the facility which were installed between the years of 1970 and 1991 and are currently in use. This information indicates that the groundwater within at least one-half mile of the facility is being used for industrial/commercial uses.

According to City of Rockford, Illinois Water Division representatives, groundwater contamination is present throughout much of the Rockford area. As a result of this contamination, several wells have been taken out of service and other wells have had treatment systems installed. However, it is not know whether treatment systems have been installed on those wells identified in the ISWS well survey performed by TechLaw.

Release History

According to the April 30, 1992, Forty Five (45) Day Report for J & M Plating, an unknown quantity of material was released from one 1,600 gallon underground storage tank containing cadmium sludge which was part of the Former Underground Tank Farm (SWMU 5). The cause was not known. Soil samples were taken from the east and west sides of the tank and results

indicated cadmium was present in the subsurface soils at a TCLP concentration (2.6 mg/L exceeding the RCRA threshold limit (1.0 mg/L). Elevated TCLP concentrations (but not above regulatory thresholds) of chromium (4.5 mg/L) and lead (0.6 mg/L) were also detected. (See Table 2 in Appendix D for a copy of the analytical results).

According to an 1985 IEPA Enforcement Brochure written by Bill Hutton and Heidi Hanson "blue sludge like waste" was dumped onto the Camcar Property Dumping Site (SWMU 9) bordering the present day J & M Plating. The dumped waste flowed west towards a concrete storm drain. The soil on the Camcar property was sampled and found to be contaminated with cyanide (5,000 ppm), cadmium (7,000 ppm), iron (87,876 ppm), zinc (50, 625 ppm), lead (87,876 ppm), chromium (400 ppm), copper (10 ppm), and nickel (30 ppm). This is the only sample analysis data available for SWMU 9. There is no evidence in the file that IEPA took any enforcement action regarding SWMU 9.

The 1985 IEPA Enforcement Brochure states that during the years when Alloy Plating owned the site, there were several unpermitted releases of waste materials into the Seminary Street Storm Drain Dump Area (SWMU 7). This drain eventually discharges into the Rock River resulting in a point source discharge of contaminants. These discharges without permit were sampled on several occasions and high levels of TSS (2,800 mg/l), cyanide (6.3 mg/l), cadmium (5.8 mg/l), copper (147.5), chromium (19.2 mg/l), iron (184.0 mg/l) and zinc (81 mg/l) were found (the concentrations show are the highest that were detected. The aforementioned Enforcement Brochure also stated that Alloy Plating had released unpermitted emissions to the air at six (6) locations within the facility. No further information is available regarding these unpermitted discharges to the air. However, the facility currently has an air permit.

IEPA Memorandums addressed to the Division File indicate that waste from the Former Facility Wide Drum Storage Areas (SWMU 4) was seen leaking out of a trailer containing approximately 40 drums of waste. During the winter of 1985, a greenish-yellow stain on the snow in the outdoor area, where drums at SWMU 4 were being stored, was also observed. There is no evidence that sampling of the soils impacted by these releases has been conducted.

During the VSI, extensive staining and deterioration were noted on the structure that supports the 5,000 Gallon Acid Storage Tank (SWMU 8). The presence of the staining and exposed soils around the tank structure suggest that paste releases may have occurred.

III. SOLID WASTE MANAGEMENT UNITS

This section presents descriptions of the Solid Waste Management Units (SWMUs) identified during the PA and VSI at the J & M Plating facility. Photograph numbers correspond to those presented in the Photograph Log in Appendix A. The locations of the SWMUs are shown on the maps included in Appendix C.

TABLE 1
SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY
J & M PLATING, ROCKFORD, ILLINOIS

SWMU	DESCRIPTION	RELEASE POTENTIAL
SWMU 1	Former Clarifier Sludge Storage Unit	Low
SWMU 2	Former Waste Paint Storage Area	Low
SWMU 3	Former Plating Waste Drum Storage Area	Moderate
SWMU 4	Former Facility Wide Drum Storage Areas	High
SWMU 5	Former Underground Tank Farm	High
SWMU 6	Current Wastewater Pre-Treatment System	Low
SWMU 7	Seminary Street Storm Drain Dump Area	High
SWMU 8	5,000 Gallon Acid Storage Tank	High
SWMU 9	Camcar Property Dumping Site	High

SWMU 1 - Former Clarifier Sludge Storage Unit

Report Photo No.: 1

Log Book Photo No(s): 1-4

Period of Operation: Approximately 1988 to present.

Location: This unit is located inside the north storage building. See Map 4 in Appendix C for the units location.

Physical Description: This unit currently consists of an area on the concrete floor of the facility building where sludges from the Current Wastewater Pre-Treatment System (SWMU 6) are stored prior to off-site disposal.

As described by R. Rybelt in IEPA Notes dated January 22, 1993, a 15 foot by 20 foot section of this unit was formerly used to store five, 200 gallon storage containers (on pallets). These storage containers contained clarifier residue from the past electroplating operations. The total volume stored at this unit in the past was no more than 1,000 gallons of waste. The construction of these containers was not noted in the file. VSI observations indicate some cracks were visible in the concrete floor and there were some areas of dark staining. There is no curbing associated with this unit.

The former clarifier storage area portion of this unit was RCRA closed during the 1990s. According to January 22, 1993 IEPA Notes, written by R. Rybelt, closure activities at this unit consisted of the following: the unit floor was scrubbed with soap and rinsed with pressurized steam. The waste was sent to Metro Recovery Systems on July 29, 1992. The fate of the 200 gallon containers and pallets is not known but these may have been shipped to the Pagel Pit landfill (several other waste containers from other SWMUs were sent to this landfill on July 29, 1992).

According to a March 17, 1997 IEPA Narrative concerning J & M Plating, the unit was "clean closed" in 1996. Clean closure was demonstrated with wipe samples. An IEPA follow up inspection in 1997 revealed no problems concerning this unit. An October 16, 1997 letter addressed to Ron Roling, J & M Plating from Edwin Bakowski, IEPA, stated that clean closure certification, signed by both Ron Roling, J & M Plating and Mark Young, independent professional engineer, had been received by IEPA and indicated that SWMU 1 had been closed in accordance with the RCRA closure plan approved by IEPA on January 23, 1996.

Wastes Managed: According to January 22, 1993 IEPA Notes, written by R. Rybelt, this unit managed spent plating bath solutions containing cadmium and cyanide (F007, D002, D006, D007) from approximately 1988 to 1992. According to Ron Roling, SWMU 1 is now used for

the storage of nonhazardous waste treatment sludge generated at the Wastewater Pre-Treatment System (SWMU 6). This sludge is removed every two (2) weeks and shipped to the BFI Landfill in Mallard Lake, Illinois.

History of Releases: No documented releases were observed during the PA/VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: There is no history of release from this unit and closure methods to address past storage of hazardous wastes were reportedly quite thorough. There is no indication in the file materials that the storage containers were in poor condition during their period of use. No further action is recommended.

SWMU 2 - Former Waste Paint Storage Area

Report Photo No.: 2

Log Book Photo No(s).: 1-5

Period of Operation: Approximately 1988 to 1992

Location: This unit was located within the north storage building on the north wall.

Physical Description: According to January 22, 1993 IEPA Notes, written by R. Rybelt, this storage unit consisted of a 10 foot by 17 foot section of concrete floor on which the 55-gallon, steel drums of waste paint and solvents were stored from a past painting project. There is a floor seam running through the storage unit (visible in photo 1-5). There is no curbing associated with this unit.

According to a March 17, 1997 IEPA Narrative concerning J & M Plating, the floor of the unit was scrubbed with soap and rinsed with pressurized steam. The drums and waste paint were sent to Clayton Chemical for fuel blending or supplemental fuel on April 21, 1992. VSI observations indicated no cracking of the concrete floor and some small areas of light staining.

Wastes Managed: The unit managed seven 55 gallon drums of waste paint (F003, F005, D001). The basis for designating these waste codes, as explained by R. Rybelt in his January 22, 1993 IEPA Notes, are as follows: "F003- spent non-halogenated solvents (waste is hazardous because it fails the test for characteristic of ignitability), corrosivity or reactivity; F005-[may contain] toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene and 2-nitropropane; D001-characteristic of ignitability." Other wastes may have been managed at this unit prior to 1988, however, no specific information is available concerning this practice. The total volume stored at this unit was no less than 385 gallons.

According to a March 17, 1997 IEPA Narrative concerning J & M Plating, the unit was officially "clean closed" in 1996. Clean closure was demonstrated with wipe samples. An IEPA follow up inspection in 1997 revealed no problems concerning this unit. According to an October 16, 1997 letter addressed to Ron Roling, J & M Plating from Edwin Bakowski, IEPA, the clean closure certification, signed by both Ron Roling, J & M Plating and Mark Young, independent professional engineer, had been received by IEPA and indicated that SWMU 2 had been closed in accordance with the RCRA closure plan approved by IEPA on January 23, 1996.

History of Releases: No documented releases were identified during the PA/VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: There is no history of release from this unit and closure methods were thorough. There is no indication in the file materials that the drums were in poor condition during their period of use. No further action is recommended.

SWMU 3 -Former Waste Plating Solution Storage Area

Report Photo No.: 3

Log Book Photo No(s).: 1-3

Period of Operation: Approximately 1980 to 1992

Location: The unit was located outside the northern storage building against the southern exterior wall. It is to the east of the loading dock.

Physical Description: According to January 22, 1993 IEPA Notes, written by R. Rybelt, the storage unit consisted of a 15 foot by 30 foot section of cracked concrete on which a shed rested on concrete pads. Thirty-one 55 gallon drums of cadmium/cyanide plating solution were stored with in the unit. VSI observations indicated extensive cracking of the concrete base on which the shed rested. Soil was exposed at several locations.

According to a March 17, 1997 IEPA Narrative concerning J & M Plating, as part of a RCRA closure, the shed's walls and roof were removed and sent to Pagel Pit Landfill, where they were disposed of as construction debris. January 22, 1993 IEPA Notes, written by R. Rybelt, indicate that the drums of waste were sent to Clayton Chemical on April 21, 1992. The March 17, 1997 IEPA Narrative indicates that shed flooring and cement pads were sent to Michigan Disposal on June 17, 1992. The unit concrete base surface (visible in photo 1-3) was scrubbed with soap and rinsed with pressurized steam.

According to a March 17, 1997 IEPA Narrative concerning J & M Plating, the unit was officially "clean closed" in 1996. Clean closure was demonstrated with wipe samples. An IEPA follow up inspection in 1997 revealed no problems concerning this unit. According to an October 16, 1997 letter addressed to Ron Roling, J & M Plating from Edwin Bakowski, IEPA, the clean closure certification, signed by both Ron Roling, J & M Plating and Mark Young, independent professional engineer, had been received by IEPA and indicated that SWMU 3 had been closed in accordance with the RCRA closure plan approved by IEPA on January 23, 1996.

Wastes Managed: According to a March 17, 1997 IEPA Narrative concerning an inspection of the J & M Plating facility, the unit was managing thirty-one 55 gallon drums of cadmium/cyanide plating solution (F006, F007) until 1992. It is unknown if additional waste streams were managed at the unit prior to the inspection.

History of Releases: No documented releases were observed during the PA/VSI, and the unit had no known history of release.

Potential for Past/present Release:

High ( )
Moderate (X)
Low ( )

Conclusions: The moderate potential for past/present releases is based on the extensive cracking of the concrete floor and the long period of time the unit was in use. Confirmatory soil sampling is suggested to determine if release occurred to soils underlying the cracked concrete floor.

SWMU 4 -Former Facility Wide Drum Storage Areas

Log Book Photo No(s).: No photograph.

Period of Operation: Approximately 1980 to 1985

Location: This unit was located throughout the facility site.

Physical Description: This unit consisted of numerous areas of concrete and/or asphalt and possibly gravel where 55-gallon drums (many of them unlabeled and in poor condition) of various wastes were stored for unknown periods of time. Trailers containing drums were also present on the asphalt surfaces. The outdoor concrete surfaces have extensive cracking and there are areas of cracking/joint lines in the north storage building. According to an April 24, 1985 IEPA Memorandum to the Division File, by April 24, 1985 up to 1,445 drums of waste were stored in this unit (throughout the facility properly).

According to the Legal File: Alloy Plating - Chronology of Events, on February 6, 1985, six samples were taken by IEPA from the drums stored at the Alloy Plating facility, and these samples showed the presence of cyanide (levels were not noted). On February 8, 1985 the IEPA decided to proceed with a State Superfund action and informed Alloy Plating of this by notice on February 13, 1985.

An undated IEPA Record of Decision for Immediate Removal Action contained February 6, 1985 sample results from drums and spilled sludge showing total cyanide levels as high as 470,000 ppm and a statement that the facility poses a significant risk to human health, life and the environment. It also states that "[a]s a result of the release and threatened releases...[IEPA] has determined that immediate removal actions must be taken in order to prevent or mitigate immediate and significant risks..." The document does not mention RCRA closure, and no closure plan was found in the facility file. In a January 22, 1986 IEPA Memorandum addressed to the Division File from E. Lin the following activities are referred to as "voluntary cleanup."

According to a March 19, 1985 IEPA Memorandum addressed to the Division File on March 13, 1985, S.E.T. Liquid Waste Systems (SET), with IEPA oversight, started clean up work at the J&M Plating facility, which at this time was owned by Fascote. The following activities took place between March 16, 1985 and April 12, 1985: The waste characteristics of the drummed material was determined and they were staged according to these characteristics. Also, it was determined that most of the drummed waste contained cyanide with low and high pH characteristics.

By April 24, 1985 drum segregation by waste type had been completed. A May 2, 1985 IEPA Memorandum to the Division File states that on April 25, 1985, PDC Response, Inc. (PDC) received an experimental permit (it is not stated who issued this permit) to perform an on-site alkalization process.

A May 23, 1985 IEPA Memorandum to the Division File, states the following: On May 9, 1985 an on site alkalization process (under the direction of PDC) in order to treat the contents of 715 drums containing low pH and cyanide wastes. After waste treatment, the empty drums were rinsed with high pressure steam. Metal drums were sent to a special waste landfill site and plastic drums were sent to a drum recycle. On May 13, 1995 Service Master began the cleanup of the floor, plating equipment and empty drums. Rinse water was sent to Chem-Clear. On the same day plating solution was removed from the plating vats using a vacuum pump.

According to a July 3, 1985 IEPA Memorandum to the Division File the alkalization waste treatment project was finished on June 6, 1985. By this time all liquid waste had been transported off-site. The solid waste had been moved to the maintenance building. The plating tanks had been rinsed, cleaned and painted. The floor in the main building had been rinsed with high pressure steam. The two southern rooms had new concrete poured into them after the rinsing activities were completed.

Wastes Managed: This unit managed no fewer than 1,445 fifty-five (55) gallon drums, most of which contained cadmium/cyanide plating wastes. The pH of the wastes ranged from very low to very high levels.

History of Releases: There were many spills from this unit. According to IEPA Memorandums addressed to the Division File dated February 14, 1985 and February 15, 1985 the following occurred: On February 4, 1985, IEPA visited the Alloy Plating site and observed that within the main building in the room containing plating vats and heat treating furnaces, a puddle 1 inch deep of "dark brown liquid"was discovered. Spilled sludge on the floor was noted in the loading dock area. Waste was also seen leaking out of a trailer containing approximately 40 drums. During the winter of 1985 a greenish yellow stain on the snow in the outdoor area where the barrels and trucks were stored was observed.

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: During 1985 this SWMU underwent immediate removal action or "voluntary cleanup" with IEPA oversight. There is no evidence that any confirmatory soil sampling was performed or required at this site. Bob Wengrow, IEPA, confirms that there was no soil sampling conducted as part of the removal action. It is suggested that the soil be sampled throughout the facility (indoors and outdoors) to determine if releases occurred while the drums of plating wastes were being stored throughout the facility.

SWMU 5 - Former Underground Tank Farm

Report Photo No(s).: 4, 5

Log Book Photo No(s).:1-1, 1-2

Period of Operation: No later than 1984 to 1992

Location: This unit was located below the main facility building. Several of the USTs which composed this unit are shown on Map 2 in Appendix C.

Physical Description: This tank farm consisted of approximately fifteen (15) 1,600-gallon USTs. The initial use of the tanks is not known and the material of construction for these USTs is not known. According to an August 28, 1995 IEPA Memorandum to the Division File, all of the USTs (except one) had their contents removed in 1985. According to an October 16, 1985 RCRA Inspection Report Form, all but one of the underground tanks were filled with cement. The only evidence of soil or groundwater sampling at the facility is associated with the one 1600 gallon UST that was not emptied and filled in 1985. That tank reportedly stored cadmium sludge.

According to the April 30, 1992, Forty Five (45) Day Report for J & M Plating, the tank which contents were not removed (one tank) was addressed in 1991, with the following actions. The tank cleaning was conducted by Tank and Industrial Cleaning Service and consisted of removing all materials within the tank, processing those materials through J & M Plating's Current Wastewaster Pre-Treatment System (SWMU 6), scrubbing the UST with trisodium phosphate and triple rinsing with a high pressure water rinse which was also subsequently processed through the J & M Plating Wastewater Pre-Treatment System (SWMU 6). This work was completed on September 9, 1991. J & M Plating is currently petitioning to abandon the UST. Ron Roling, a J & M Plating representative, stated that he was told upon purchase of the facility that all but one of the USTs at the facility had been "removed." There is no documentation of this in the file.

Wastes Managed: The intended use for the tanks comprising this unit is not known. This unit was initially identified in the file materials as a UST Farm, which means that it probably did not, originally, manage waste.

However, one of the USTs was found to contain plating waste (for this reason it probably qualified as a RCRA Hazardous Waste Management Unit rather than an UST). According to the April 30, 1992, Forty Five (45) Day Report for J & M Plating, both the top waters and bottom sludges of the plating waste within the UST were sampled and analyzed by C & L Equipment, Inc. The top waters were found to contain the following substances at the following concentrations: zinc (6,800 ppm), cadmium (35 ppm), copper (43 ppm), nickel (10 ppm),

chromium (730 ppm), and iron (53 ppm). The bottom sludges were found to contain the following substances at the following concentrations: zinc (6,800 ppm), cadmium (35 ppm), copper (50 ppm), nickel (11 ppm), chromium (1,100 ppm), and iron (550 ppm). No samples were collected for cyanide analysis prior to on site treatment.

History of Releases: According to the April 30, 1992, Forty Five (45) Day Report for J & M Plating, soils were collected through the east and west walls at the base of the UST (that stored cadmium sludge. Analytical results indicated cadmium was present in the subsurface soils at a TCLP concentration (2.6 mg/L) exceeding the RCRA threshold (1.0 mg/L). Elevated TCLP concentrations (but not above regulatory thresholds) of chromium (4.5 mg/L) and lead (0.6 mg/L) were also detected. Table 2 in Appendix D shows the results of the TCLP analyses.

The remaining tanks (approximately 14) that were filled with cement in 1985 may have leaked prior to abandonment procedures. However, releases from these tanks have not been documented.

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: It is suggested that all fifteen (15) tanks be investigated to verify that they are filled with inert material. Confirmatory soil samples should be taken in the areas around each of the USTs.

SWMU 6 - Current Wastewater Pre-Treatment System

Report Photo No.: No Photograph

Log Book Photo No(s).: No Photograph.

Period of Operation: 1989 to Present

Location: This unit is located in the center of the main facility building.

Physical Description: This unit consists of a process wastewater pre-treatment system which is used to treat wastewater from the current zinc electroplating process. The unit is composed of three (3) holding/settling tanks, a sludge dryer unit constructed of steel, and two (2) filter presses constructed of steel. The unit is located entirely indoors on a concrete floor and the present system has had several "upgrades" since 1989. Sludges generated in the unit are taken to the Former Clarifier Sludge Storage Unit (SWMU 1) for storage. Treated wastewaters are discharged to the sanitary sewers. According to Dennis Priewe, of the Rock River Water Reclamation District, the Operation and Discharge Permit for the system is on file with the District. The permit allows J & M Plating to discharge treated waste water into the Rock River Water Reclamation District sewer system.

It was not known by the J & M Plating representative whether the Current Wastewater Pre-Treatment System is the same system which was in use throughout the late 1970s and 1980s. According to the February 1985 IEPA Enforcement Brochure, Alloy Plating "operated a wastewater treatment system, which for a number of years discharged into the Rockford sanitary sewer system. The system was inspected on October 5, 1983 [and was found to be unpermitted.]" The system was modified on or about January 20, 1984 to become close-looped (no longer discharging to the sanitary sewer), but remained unpermitted as of 1985.

According to the Legal File: Alloy Plating - Chronology of Events, on April 6, 1984 the Rockford Sanitary District, filed suit against Alloy Plating for discharging high levels of cyanide, cadmium and zinc into the sewer. On April 11, 1984 Alloy Plating was indicted on charges of violating the Illinois Environmental Protection Act. The charges included Calculated Criminal Disposal of Hazardous Waste, Unauthorized Use of Hazardous Waste, Reckless Disposal of Hazardous Waste, and Conspiracy.

According to the Legal File: Alloy Plating - Chronology of Events, on October 24, 1984 the case of Rockford Sanitary District v. Alloy was decided. The court levied a fine of $158,500 plus attorney fees. On February 4, 1985 the Rockford Sanitary District levied against Alloy Plating as the facility did not pay the fine and failed to file an appeal bond when it appealed the judgement.

According to the Legal File: Alloy Plating - Chronology of Events, on February 19, 1985, the Rockford Sanitary District and Alloy Plating settled their pending appeal. Their agreement included a $27,000 fine, the payment of several utility bills and assistance in cleanup activities (these were not specified).

According to the Legal File: Alloy Plating - Chronology of Events, the following occurred: On February 20, 1985 the Rockford Sanitary District released its levy and Alloy regained possession of their property.

Wastes Managed: According to Ron Roling, the following wastes are managed by the Current Wastewater Pre-Treatment System: acidic waste water generated by zinc electroplating operations and waste water treatment sludge. The sludge is nonhazardous and is taken to the Former Clarifier Sludge Storage Unit (SWMU 1). The sludge is removed from SWMU 1 every two (2) weeks and shipped to the BFI Landfill in Mallard Lake, Illinois.

History of Releases: No documented releases were observed during the PA/VSI. It is not known if the previous wastewater discharges to the sanitary sewer resulted in releases.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: Presently, this unit has a low potential for release. Since legal action was taken in the past by the Rockford Sanitary District, and this action was settled, no further corrective action activities are recommended.

SWMU 7- Seminary Street Storm Drain Dump Area

Report Photo No.: No Photograph

Log Book Photo No(s).: No photograph.

Period of Operation: Approximately 1974 to 1983

Location: This unit is located beneath Seminary Street to the east of the site.

Physical Description: According to the February 1985 IEPA Enforcement Brochure, this unit consisted of "a storm grate in the parking lot on the northeast side of [Alloy Plating's] main building. [This drain eventually] leads to the storm sewer which runs under the middle of Seminary Street [and] discharges into the Rock River in Blackhawk Park." The Rock River lies 2,000 feet to the west of the site. The unit received unpermitted dumping of plating waste for an unknown period of time.

Wastes Managed: According to a 1985 IEPA Enforcement Brochure unpermitted discharges to the storm drain were sampled on no fewer than seven (7) occasions between November 3, 1983 to April 12, 1984 by IEPA. High levels of TSS (2,800 mg/l), cyanide (6.3 mg/l), cadmium (5.8 mg/l), copper (147.5), chromium (19.2 mg/l), iron (184.0 mg/l) and zinc (81 mg/l) were found. The contaminants present in J & M Plating's discharge were probably diluted by discharges from other drains prior to reaching the Rock River.

History of Releases: According to the February 1985 IEPA Enforcement Brochure written by Bill Hutton and Heidi Hanson, facility employees were discovered discharging waste materials into the unit no fewer than eight (8) times between the dates November 3, 1983 to April 12, 1984. These discharges may have flowed to the Rock River. This discharging was in violation of Sections 12(f), and 12(a), and Administrative Code 304.124 of the Illinois Environmental Protection Act. According to a document titled Legal File: Alloy Plating - Chronology of Events, Alloy responded to the Compliance Inquiry Letter on November 14, 1983 and agreed to cease discharging into the unit.

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: Soil sampling around the storm grate, outfall, and beneath the drainline which runs from the facility parking lot to the Seminary Street storm sewer are recommended.

SWMU 8 - 5,000 Gallon Acid Storage Tank

Report Photo No.: 6

Log Book Photo No(s).: 1-6

Period of Operation: Unknown, it has not been used within the past decade

Location: This unit is located outside, against the southern wall of the main building.

Physical Description: This unit consists of a 5,000 gallon acid storage tank. Available file materials and facility representatives did not indicate materials of construction for the tank. It is currently empty and rests on a large concrete block approximately 10 feet high. VSI observations indicate that there is extensive staining on this support block and also areas where the concrete is deteriorated. There are some areas of exposed soil around the tank which could have been contaminated as a result of spills.

Wastes Managed: According to Ron Roling, J & M Plating, this tank managed "acid" when it was in use.

History of Releases: No documented releases were found, however, the extensive staining and deterioration of the base suggests continual release.

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: This unit has a high potential for past release. Given that the tank is currently empty the risk of future releases is low. It is suggested that confirmatory soil samples be collected from areas around this tank.

SWMU 9 - Camcar Property Dumping Site

Report Photo No.: No Photograph

Log Book Photo No(s).: No Photograph

Period of Operation: Unknown to 1984

Location: According to a February 1985 IEPA Enforcement Brochure the unit is located the southwest corner of the main (operations) building at the J & M Plating facility, and included an adjacent offsite property owned by Camcar.

Physical Description: The unit consists of an area of potentially contaminated soil at the southwest corner of the J & M Plating facility. Files indicate that a sludge material was disposed of on the soil within the J & M Plating facility boundary and migrated to the adjacent Camcar property. The dimensions of this area are not known. West of the impacted soil is a concrete storm drain.

Wastes Managed: According to a 1985 IEPA Enforcement Brochure, "blue sludge like waste" was dumped onto soils at this unit. The soil on the Camcar property was sampled and was found to be contaminated with cyanide (5,000 ppm), cadmium (7,000 ppm), iron (87,876 ppm), zinc (50, 625 ppm), lead (87,876 ppm), chromium (400), copper (10 ppm), and nickel (30 ppm).

History of Releases: The 1985 IEPA Enforcement Brochure states that the dumped waste flowed west towards a concrete storm drain. This dumping was reportedly in violation of Sections 12(d) and 21(a) of the Illinois Environmental Protection Act. Sampling on the adjacent Cancar property showed elevated levels of cyanide and several metals (see "Wastes Managed," above).

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: Although the February 1985 IEPA Enforcement Brochure calls for IEPA enforcement action, there is no indication that the Camcar Property Dumping Site (SWMU 9) was ever cleaned up. Confirmatory soil sampling is suggested at the southwest corner of the J & M Plating property and on the Camcar property.

IV. AREAS OF CONCERN

No areas of concern were identified during the PA and VSI of the J & M Plating faciltiy.

V. CONCLUSIONS

Based on observations made during the VSI and analytical results of soil sampling conducted at the facility, further investigation under Corrective Action Authorities appear warranted for several SWMUs. It is recommended that the further actions under Corrective Action Authorities described below be coordinated with any IEPA-approved plans.

Two stages of investigation are suggested for this facility as outlined below:

- RFI activities are suggested at the following units since documented releases to environmental media have occurred:

  - Former Facility Wide Drum Storage Area (SWMU 4)
  - Former Underground Tank Farm (SWMU 5)
  - Camcar Property Dumping Site (SWMU 9)

- Further soil sampling is suggested at the following units to confirm whether releases to the environment have occurred:

  - Former Waste Plating Solution Storage Area (SWMU 3)
  - Seminary Street Storm Drain Dump Area (SWMU 7)
  - 5,000 Gallon Acid Storage Tank (SWMU 8)

VI. REFERENCES

1. November 18, 1980, Hazardous Waste Permit Application for Alloy Plating.

2. March 12, 1981 addressed to IEPA from Duane L. Dickson of Alloy Plating.

3. 1982 IEPA Generator Annual Hazardous Waste Report for Alloy Plating.

4. January 17, 1983 letter addressed to Duane L. Dickson of Alloy Plating from K. Kleipitsch of USEPA.

5. August 23, 1983 RCRA Inspection Report, Form B Generator Inspection (40 CFR Part 262).

6. August 31, 1983 Compliance Inquiry Letter addressed to Duane Dickson, Alloy Plating, from Robert Wengrow, IEPA.

7. November 23, 1983 Letter addressed to Duane Dickson, Alloy Plating, from Bob Wengrow, IEPA.

8. December 12, 1983 Letter addressed to Harris Chien, IEPA from R. Dickson, Alloy Plating.

9. December 15, 1983, Letter addressed to R. Dickson, Alloy Plating from Harris Chien, IEPA.

10. December, 16 1983 IEPA Memorandum addressed to Bob Wengrow from R.L. Munger.

11. January 3, 1984 Letter addressed to Harris Chien, IEPA from R. Dickson, Alloy Plating.

12. January 17, 1984 letter addressed to R. Dickson from H. Chien of IEPA.

13. February 2, 1984 letter addressed to H. Chien of IEPA from R. Dickson.

14. March 1, 1984 IEPA Generator Annual Hazardous Waste Report for Alloy Plating for 1983.

15. March 1984 IEPA Special Analysis Forms for samples from the period of 3-9-84 through 3-21-84.

16. April 3, 1984 Special Analysis Forms for samples dated April 2, 1984.C4568, C4567, C4569.

17. August 3, 1984 letter addressed to R. Dickson of Alloy Plating from IEPA.

18. September 21, 1984 IEPA-DLPC Telephone Conversation Record between R.L. Munger and R. Dickson.

19. 1984, Berg, R.C., Kempton, J.P. and Stecyk, A.N., *Geology for Planning in Boone and Winnebago Counties.*, Illinois Dept. of Energy and Natural Resources: State Geological Survey Division, Circular 531.

20. February 1985 Enforcement Brochure for Alloy Plating Corp.

21. February 14-15, 1985 IEPA Division File written by R.L. Munger.

22. February 20, 1985 Letter addressed to Heidi Hanson, IEPA from J. Roseberg of Reno, Zahm, Folgate, Lindberg, & Powell.

21. February 22, 1985 IEPA Memorandum written by R.L. Munger.

22. February 26, 1985 Mid-America Environmental Systems Inc. Work Proposal for Alloy Plating.

23. March 4, 1985 letter addressed to Heidi Hanson, IEPA from Charles F. Helsten of Thomas, Hinshaw and Culbertson.

24. March 11, 1985, Letter addressed to Duane Dixon from Heidi Hanson, IEPA.

25. March 19, 1985 IEPA Division File written by E. Lin, weekly report.

26. March 28, 1985 IEPA Division File written by E. Lin, weekly report.

27. April 15, 1985 IEPA Division File written by R. L. Munger.

28. April 18, 1985, Compliance Inquiry Letter addressed to Alloy Plating Corp. from Gregory Zak, IEPA.

29. April 18, 1985 Compliance Inquiry Letter addressed to Alloy Plating from G.T. Zak of IEPA-DLPC.

30. April 22, 1985 RCRA Inspection Report for Alloy Plating, written by R.L. Munger.

31. April 24, 1985 IEPA Division File written by E. Lin.

32. May 2, 1985 IEPA Division File written by E. Lin.

33. May 23, 1985 IEPA Division File written by E. Lin.

34. May 24, 1985 IEPA Division File written by R. L. Munger.

35. June 3, 1985 IEPA Division File written by E. Lin.

36. June 5, 1985 IEPA Division File written by E. Lin.

37. July 3, 1985 IEPA Division File written by E. Lin/Maywood.

38. October 16, 1985 RCRA Inspection Report Form B Generator for Fascote, Inc.

39. October 30, 1985 letter addressed to Eddy Lin, IEPA from Donald Wesner, Fascote, Inc.

40. November 1, 1985 Compliance Inquiry Letter addressed to Fascote, Inc. From IEPA.

41. December 6, 1985 letter addressed to IEPA from Fascote, Inc.

42. 1985, Alloy Plating Chronology of Events, Legal File.

43. January 30, 1986 letter addressed to Frank Taylor of Fascote, Inc. From Mark Haney, IEPA.

44. January 22, 1986 IEPA Division File written by E. Lin.

45. February 23, 1987 List of Counts Against Alloy Plating.

46. July 5, 1988 letter addressed to L.W. Eastep, IEPA from M.B. Pettineo of BFI Waste Systems.

47. Lamb, Joe. "Alloy Plating fined $600,000" The Rockford Register Star, July 17, 1986.

48. IEPA 1988 Generator Annual Hazardous Waste Report for J&M Plating.

49. IEPA 1989 Generator Annual Hazardous Waste Report for J&M Plating.

50. July 13, 1990 letter addressed to Vickie Beard, IEPA from Ron Roling of J&M Plating.

51. IEPA 1990 Generator Annual Hazardous Waste Report for J&M Plating.

52. October 28, 1991, IEPA Leaking Underground Storage Tank Program 20 Day Certification.

53. February 12, 1992 Facsimile message: "Analysis of Floor Pit" sent to Mark Morris of J & M Plating from Craig Helsten of C & L Equipment.

54. April 21, 1992 Post Evaluation Inspection Remarks for J & M Plating.

55. June 17, 1992 letter addressed to J&M Plating from M. Favor of Michigan Disposal.

56. June 22, 1992 Pre-Enforcement Conference letter addressed to M. Morris of J & M Plating from IEPA.

57. August 27, 1992 letter addressed to Dave Kurlinkus from Thomas Davis of Fehr-Graham and Associates.

58. August 31, 1992 Draft Cleanup Recommendations for J & M Plating.

59. September 15, 1992, J& M Plating Detail Plan Map, Fehr Graham and Associates.

60. December 1992, Closure Plan for J & M Plating, prepared by Fehr-Graham ans Associates.

61. December 9, 1992 letter addressed to Mary Canterbury, IEPA from Charles Helsten of Hinshaw and Culbertson.

62. December 14, 1992 letter addressed to IEPA from Thomas Davis of Fehr-Graham & Associates.

63. 1992 IEPA-LUST Program 45 Day Report for J & M Plating prepared by Environmental Technical Assistance Co.

64. January 22, 1993 IEPA Notes, R. Rybelt.

65. January 26, 1993 letter addressed to Mark Morris of J & M Plating from Brian White, IEPA.

66. March 15, 1993, Letter addressed to Thomas Davis, Fehr-Graham and Associates from Lawrence Eastep, IEPA.

67. August 28, 1995 Memo to the IEPA-Permit Section from Bob Wengrow.

68. May 1, 1996 Operating Permit for a Smaller Source for J & M Plating.

69. March 17, 1997 IEPA Narrative concerning J & M Plating.

70. October 16, 1997 Letter addressed to Ron Roling from Edwin Bakowski, IEPA.

71. November 5, 1997, VSI Logbook for J & M Plating. Bill Goold and Alison Evans.

72. Dec. 1 and 16, 1997 Personal Communication, Bob Nimmo and Dave Sanquist, City of Rockford, Illinois Water Division.

73. December 17, 1997, Personal communication, Ron Roling, Controller, J & M Plating.

74. December 17, 1997, Electronic Mail concerning DOT shipping label, Dave Rawicz.

75. January 12, 1997, Personal Communication, Dennis Priewe, Rock River Water Reclamation District.

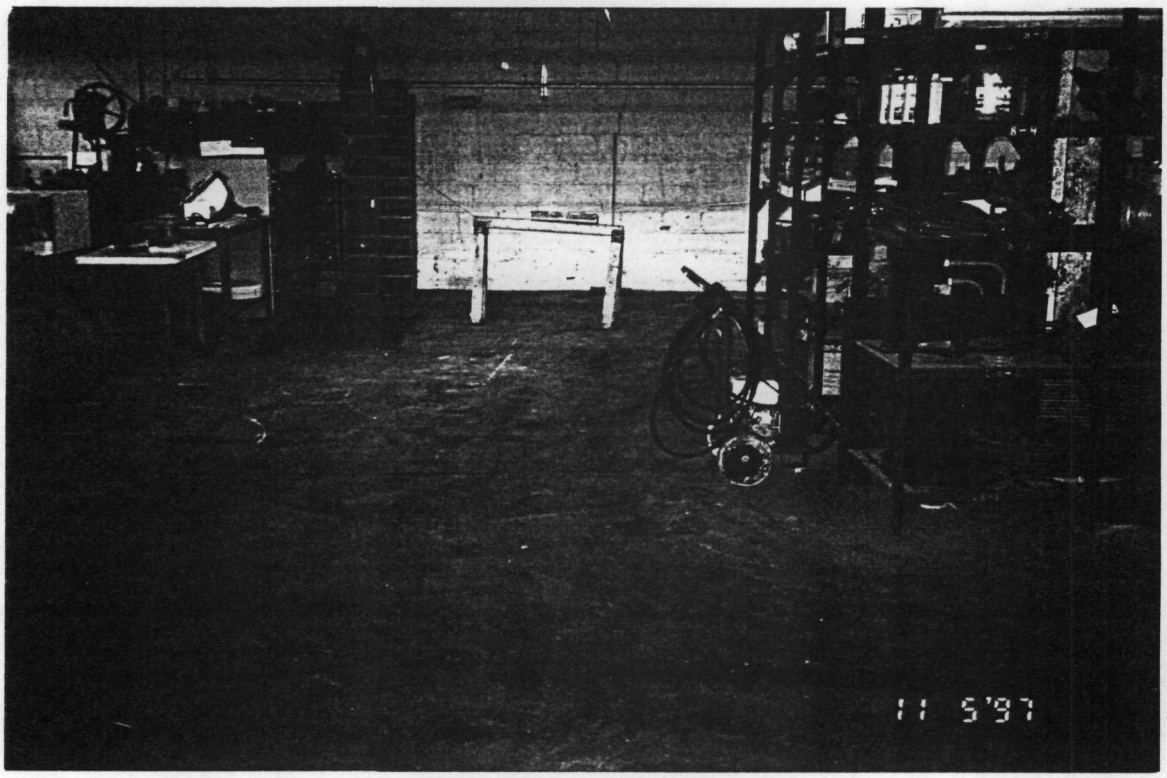
76. Undated IEPA Record of Decision for Immediate Removal Action for Alloy Plating.

APPENDIX A
Visual Site Inspection Photograph Log

Report Photo No.: 1
Log Book Photo No.: 1-4
Date: November 5, 1997

Time: 0830-1100
Direction: North

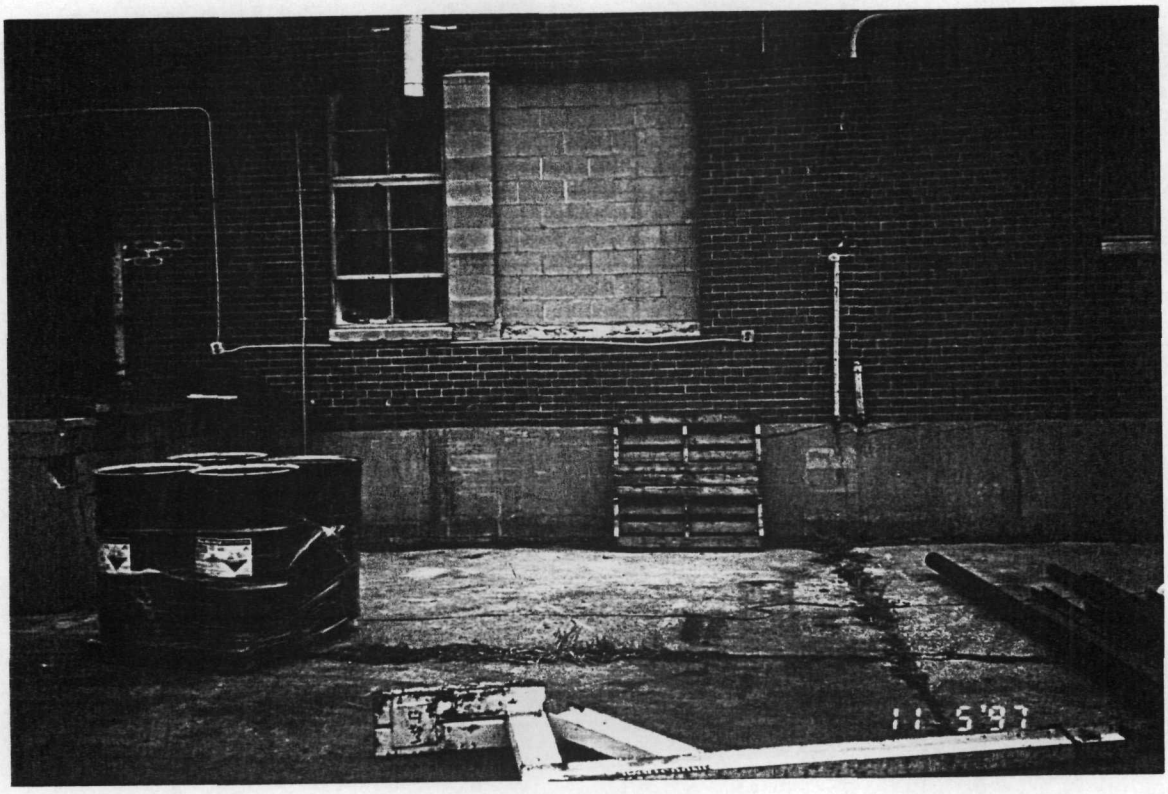
Description: View of the Former Clarifier Sludge Storage Unit (SWMU 1). Note the cracks in the floor and dark staining. Non-hazardous sludge from the Current Wastewater Pre-Treatment System (SWMU 6) is currently stored at SWMU 1.



Report Photo No.: 2
Log Book Photo No.: 1-5
Date: November 5, 1997

Time: 0830-1100
Direction: North

Description: View of the Former Waste Paint Storage Area (SWMU 2).



Report Photo No.: 3
Log Book Photo No.: 1-3
Date: November 5, 1997

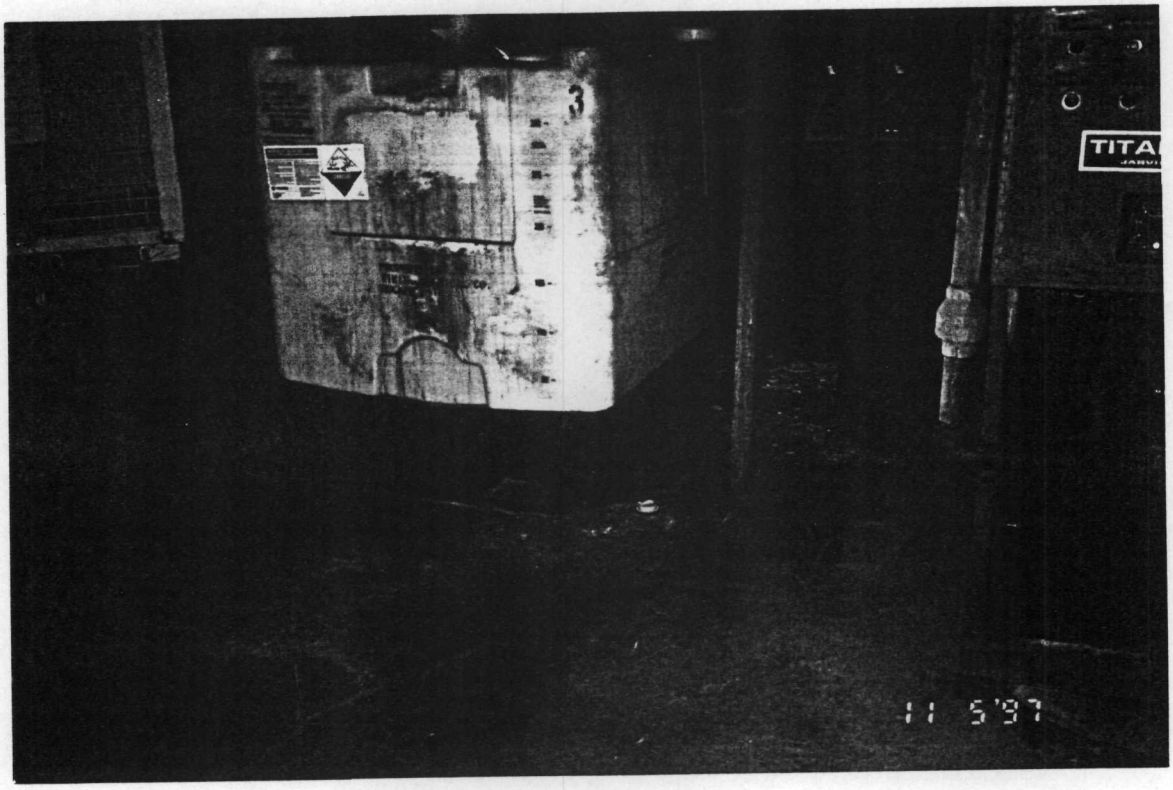
Time: 0830-1100
Direction: North

Description: View of the Former Waste Plating Solution Storage Area (SWMU 3). Note the extensive cracks with vegetation growing through them.

Report Photo No.: 4
Log Book Photo No.: 1-1
Date: November 5, 1997

Time: 0830-1100
Direction: North

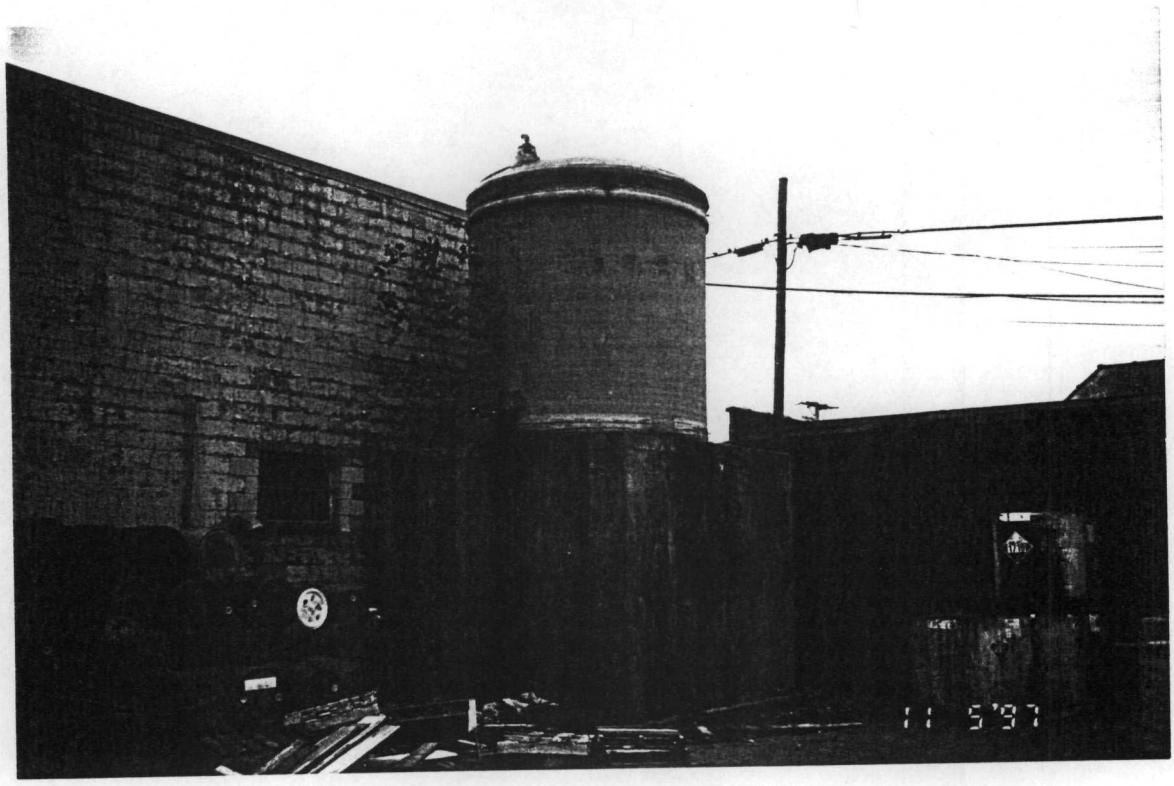
Description: This photo shows the area that covers seven filled, capped USTs (these are part of SWMU 5). The nearest UST is located beneath the red circle at the bottom-center.



Report Photo No.: 5
Log Book Photo No.: 1-2
Date: November 5, 1997

Time: 0830-1100
Direction: East

Description: View of the cap covering one of the 1,600 gallon USTs (part of SWMU 5). The cap is located beneath the cadmium line and is visible at the right-front corner of the white tank. The soil around this UST was sampled and is contaminated with cadmium.



Report Photo No.: 6
Log Book Photo No.:1-6
Date: November 5, 1997

Time: 0830-1100
Direction: North

Description: View of the outdoor 5,000 Gallon Acid Storage Tank (SWMU 8). Note the extensive staining and deterioration of the concrete block beneath the tank. The car buoys on the right side are marked with the U.N. number 1719 which represents caustic alkali liquids.

APPENDIX B
Visual Site Inspection Field Notebooks

CONVERSIONS

TIPLY BY	TO FIND
0	centimeters
0	centimeters
4	meters
9	kilometers
9	inches
3	inches
0	feet
3	yards
1	miles
0	grams
3	kilograms
5	ounces
4	pounds
3	milliliters
3	liters
6	liters
5	liters
3	fluid ounces
6	quarts
4	gallons (U.S.)

	Milli-meters
	1.5875
	3.1750
	4.7625
	6.3500
	7.9350
	9.5250
	12.700
	15.875
	19.050
	22.225
	25.400
	50.800
	76.200
	101.60
	127.00
	152.40
	177.80
	203.20
	228.60
	254.00
	279.40
	304.80

"Rite in the Rain"®
ALL-WEATHER WRITING PAPER

Name J+M Plating
1711 Seminary St.
Address Rockford IL 61104
ILD 998783995
Phone (815) 964-4975

Project Alison Evans
Tech Law Inc. Project Office
Philadelphia
A. Evans and B. Goold, Techlaw
Ron Rolling, J+M Plating

"Rite in the Rain" - a unique all-weather writing surface created to shed water and to enhance the written image. Makes it possible to write sharp, legible field data in any kind of weather.

a product of

J. L. DARLING CORPORATION
TACOMA, WA 98421-3696 USA

DATE

Nov. 5, 1997 -/ Evans

1

8:30 Met with Mr. Rolling
discussed:

- since 89' there has been
no haz waste storage

- predecessor was Frank Taylor
operated for 2 yrs.

- prior to Taylor, Alley

- Indoor Drum Storage Area was
closed down 84-85'

- no detects on heating oil or
gasoline tank UST.
  - both these tanks have been
pulled.

- Former Cadmium sludge Storage
Tank is being petitioned to
be abandoned.

- 1985 SWMU's have been
cleaned.

Nov 5, 1997 M. Evans
3

⇒picture AE 10 facing North

- 7 capped, pulled out UST's

⇒picture AE 11, facing east
- site of former cadmium sludge UST's

- underground plumbing was pulled out during ~~98~~ AE 96'

OUTDOOR CADMIUM BATH SOL'N DRUM STORAGE AREA (Unit 3) AE 11-20-97

⇒pic AE 12 facing North

- was on an elevated platform
- closed in 96'

INDOOR ~~PLATING SLUDGE BATH~~ PLATING SLUDGE BATH AE 11-20-97
STORAGE AREA (AREA 1) AE 11-20-97

⇒pic AE 13 facing North - closed 96

INDOOR ~~PLATING SLUDGE BATH~~ PAINT WASTE 11-20-97
STORAGE AREA AREA 2)

⇒pic AE 14 facing North - closed 96

⇒ picture #15

Nov 5, 1997
A Evans

large raised OUTDOOR ACID STORAGE TANK.

- empty
- no one used it in past decade
- 10' diameter, 14' high @ 5,000 gallons.
- some deterioration of base
- when they clean out both sludges are hauled to landfill
- permit for current wastewater treatment system from PDTW
- no wells on site

concluded 11:00 AM

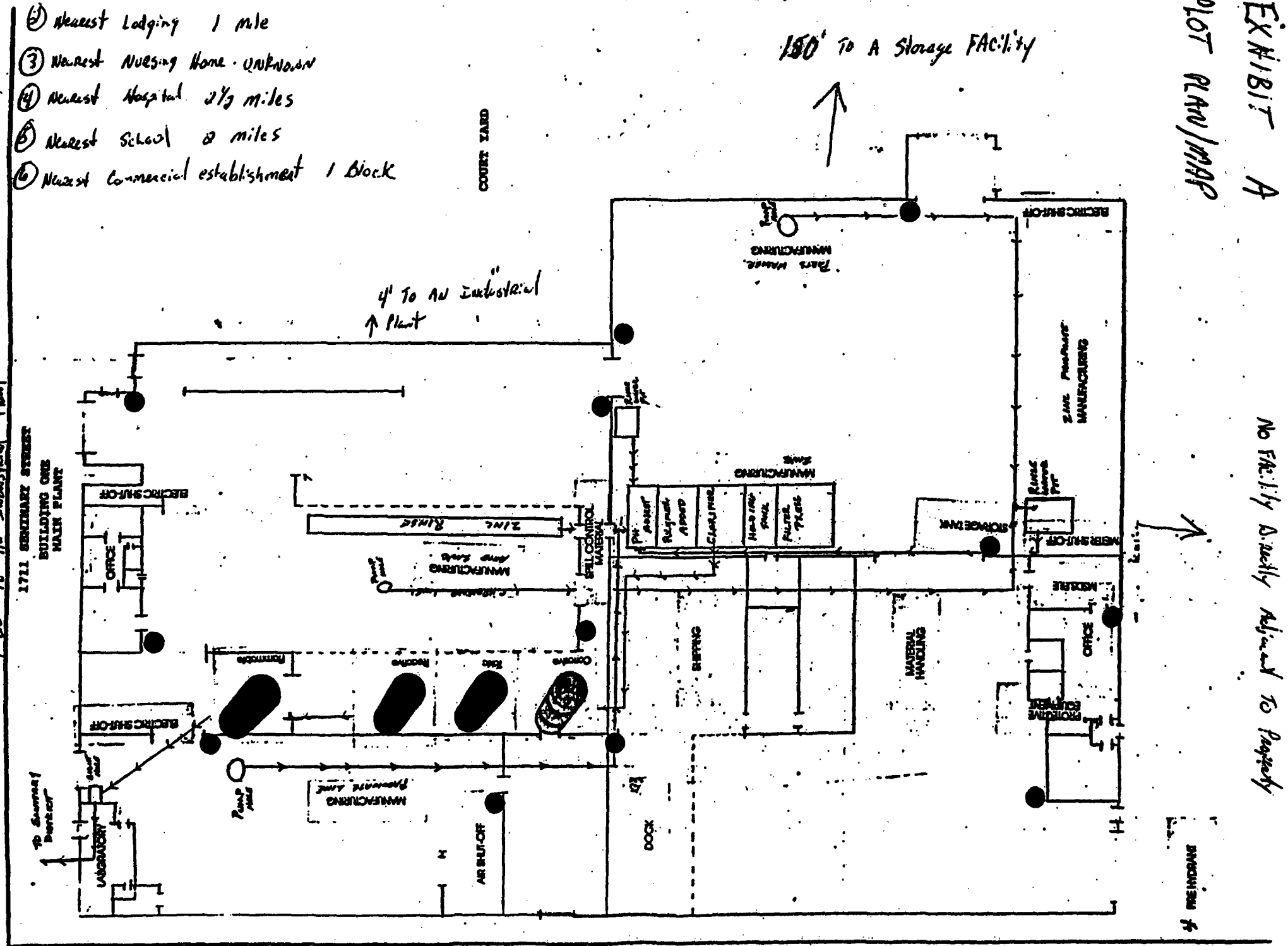
APPENDIX C
Facility Layout and SWMU Locations

① Nearest Residence 3/10 mile
② Nearest Lodging 1 mile
③ Nearest Nursing Home · UNKNOWN
④ Nearest Hospital 2½ miles
⑤ Nearest School 2 miles
⑥ Nearest Commercial establishment 1 Block

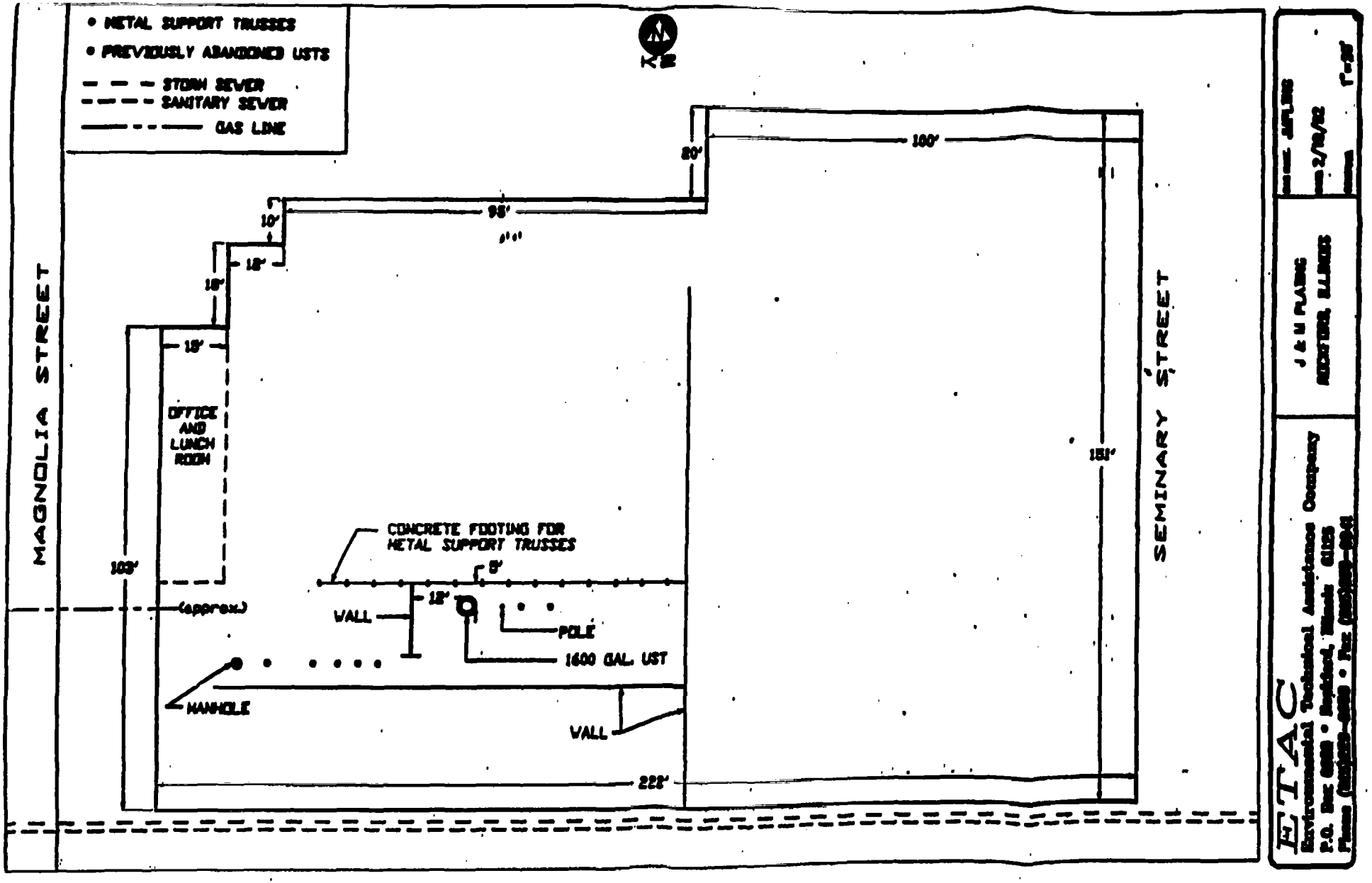
Map 1. Past operation facility layout.

EXHIBIT A
PLOT PLAN/MAP

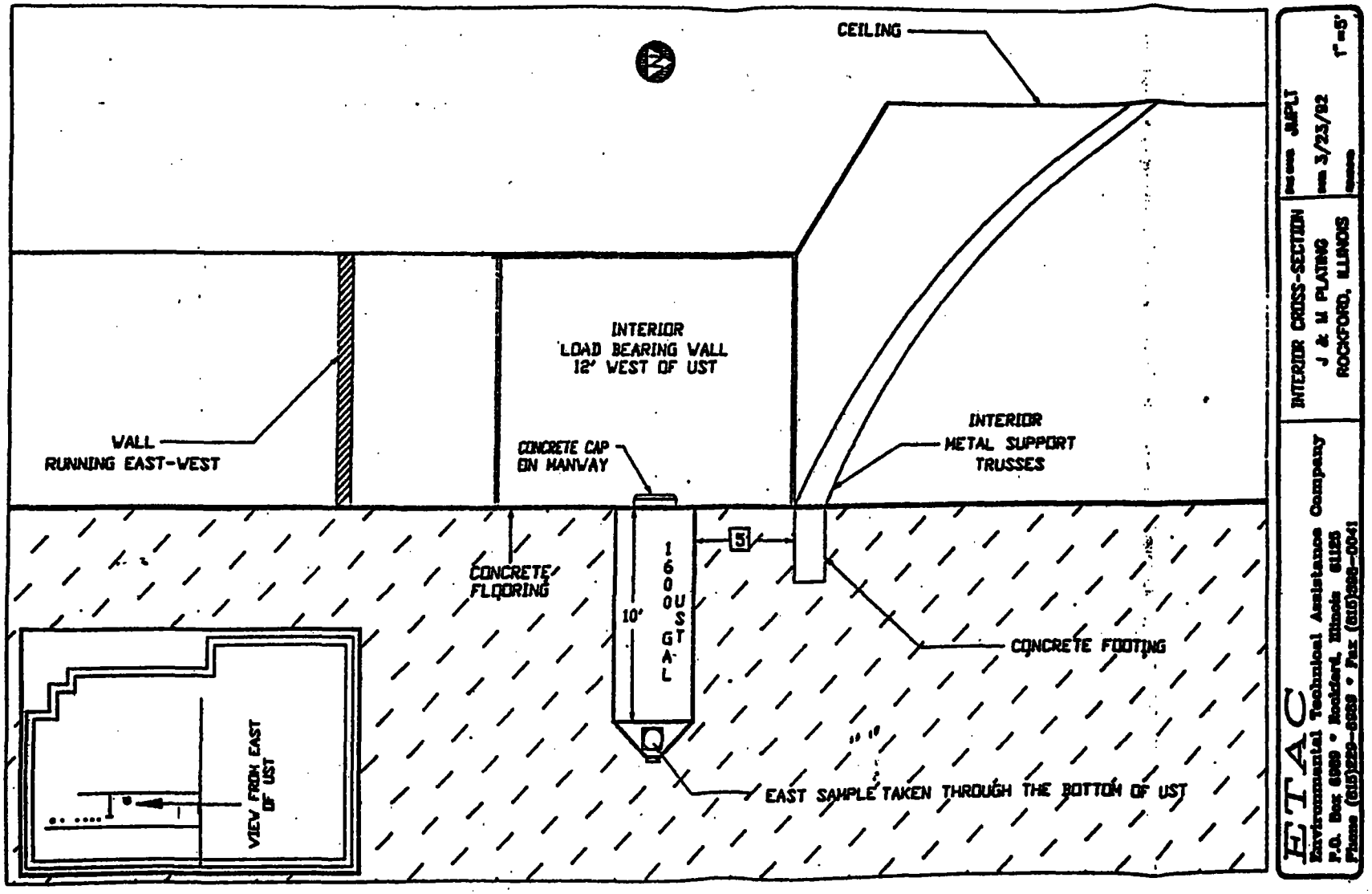
No Facility Directly Adjacent To Property



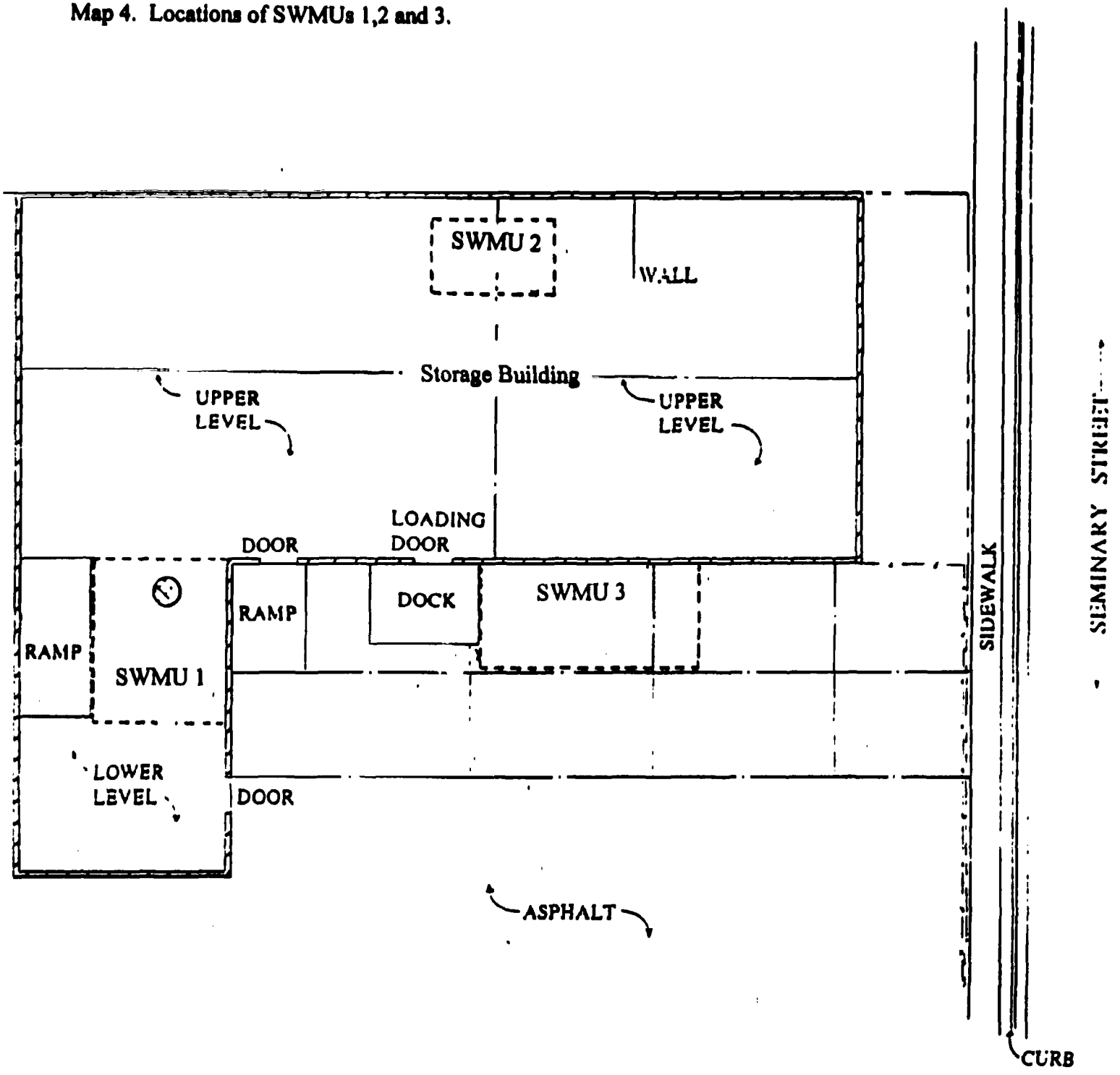
Map 2. Location of 1600 gallon UST which had a reported release in 1991 (53.)



Map 3. Side view of 1600 gallon UST which had a reported release in 1991 (53.)



Map 4. Locations of SWMUs 1,2 and 3.



APPENDIX D
Soil Sampling and Topography Data

gabriel laboratories, ltd.
Environmental & Energy Services

ANALYTICAL REPORT

TANK & INDUSTRIAL CLEANING SERVICE

LOCATION: J M PLATING
DESCRIPTION: #1 - East Bottom
CEIVED: October 02, 1991 GABRIEL LOG #:R2802-01

	CONCENTRATION		REGULATORY LIMIT	
XLP Cadmium	1.2	ppm	1.0	ppm

APPROVED BY Scott L. Schutte DATE October 24, 1991

ples were collected by client personnel.

lysis were performed according to "Standard Methods",
th Edition; ASTM latest edition.

gabriel laboratories, ltd.
Environmental & Energy Services

ANALYTICAL REPORT

TANK & INDUSTRIAL CLEANING SERVICE

SAMPLE LOCATION: J M PLATING
SAMPLE DESCRIPTION: #4 - West Bottom
DATE RECIEVED: October 02, 1991 GABRIEL LOG #:R2805-01

	CONCENTRATION		REGULATORY LIMIT	
TCLP Cadmium	2.6	ppm	1.0	ppm

ANALYSIS APPROVED BY Scott L. Schutte DATE October 24, 1991

1.) Samples were collected by client personnel.

2.) Analysis were performed according to "Standard Methods", 17th Edition; ASTM latest edition.

gabriel laboratories, ltd.
Environmental & Energy Services

ANALYTICAL REPORT

TANK & INDUSTRIAL CLEANING SERVICE

LOCATION: J M PLATING
DESCRIPTION: #1 - East Bottom
RECIEVED: October 02, 1991 GABRIEL LOG #:R2802-01

	CONCENTRATION		REGULATORY LIMIT	
Arsenic	0.118	ppm	5.0	ppm
Barium	1.8	ppm	100.0	ppm
Cadmium	1.8	ppm	1.0	ppm
Chromium	4.5	ppm	5.0	ppm
Lead	0.8	ppm	5.0	ppm
Mercury	<0.025	ppm	0.200	ppm
Selenium	<0.005	ppm	5.0	ppm
Silver	<0.1	ppm	5.0	ppm

IS APPROVED BY Scott L. Schutte DATE October 24, 1991

amples were collected by client personnel.

nalysis were performed according to "Standard Methods".
7th Edition; ASTM latest edition.

gabriel laboratories, ltd.
Environmental & Energy Services

ANALYTICAL REPORT

TANK & INDUSTRIAL CLEANING SERVICE

SAMPLE LOCATION: J M PLATING
SAMPLE DESCRIPTION: #4 - West Bottom
DATE RECIEVED: October 02, 1991 GABRIEL LOG #:R2805-01

	CONCENTRATION		REGULATORY LIMIT	
Arsenic	0.092	ppm	5.0	ppm
Barium	1.4	ppm	100.0	ppm
Cadmium	2.4	ppm	1.0	ppm
Chromium	2.2	ppm	5.0	ppm
Lead	0.5	ppm	5.0	ppm
Mercury	<0.025	ppm	0.200	ppm
Selenium	<0.005	ppm	5.0	ppm
Silver	<0.1	ppm	5.0	ppm

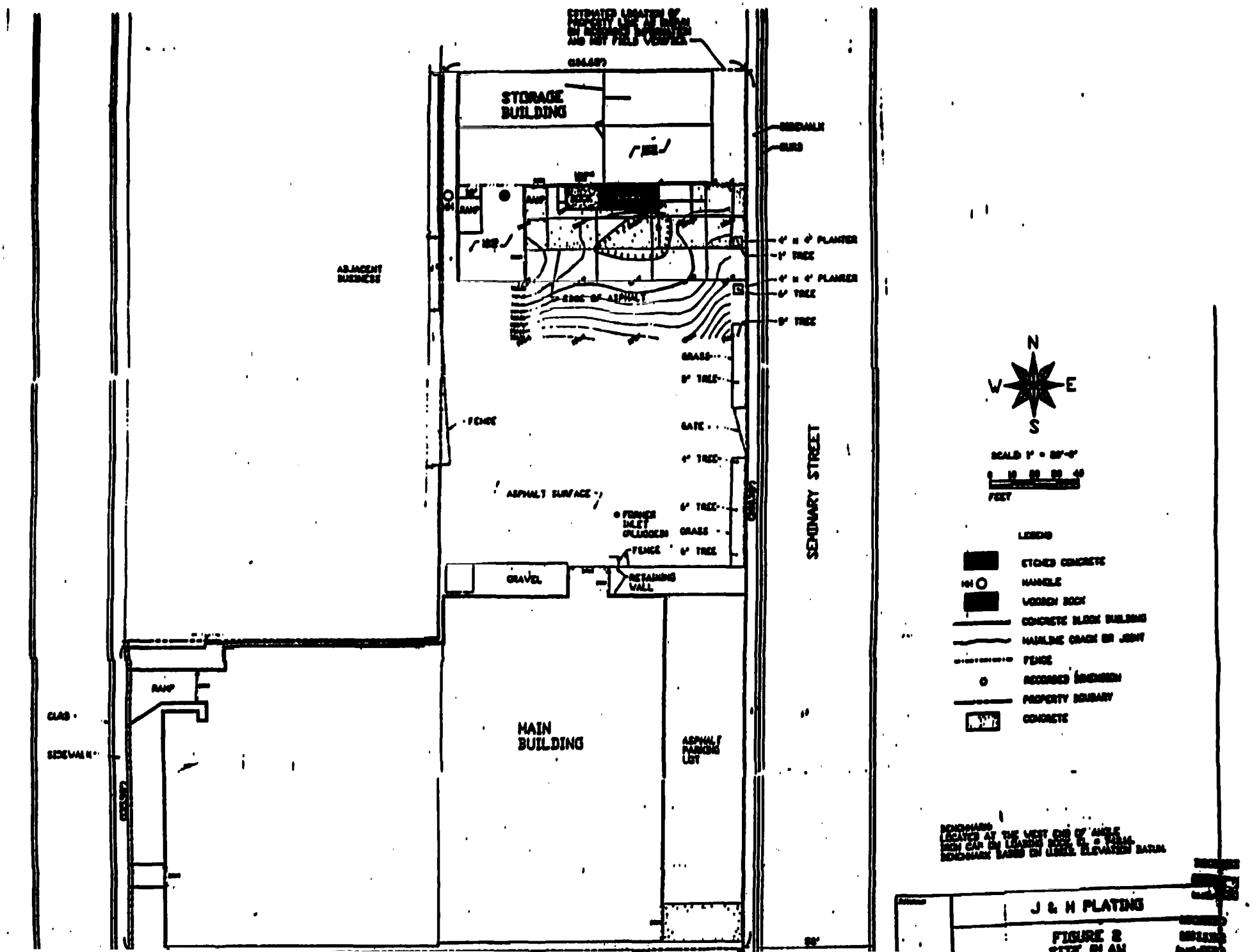
ANALYSIS APPROVED BY Scott L. Schutte DATE October 24, 1991

1.) Samples were collected by client personnel.

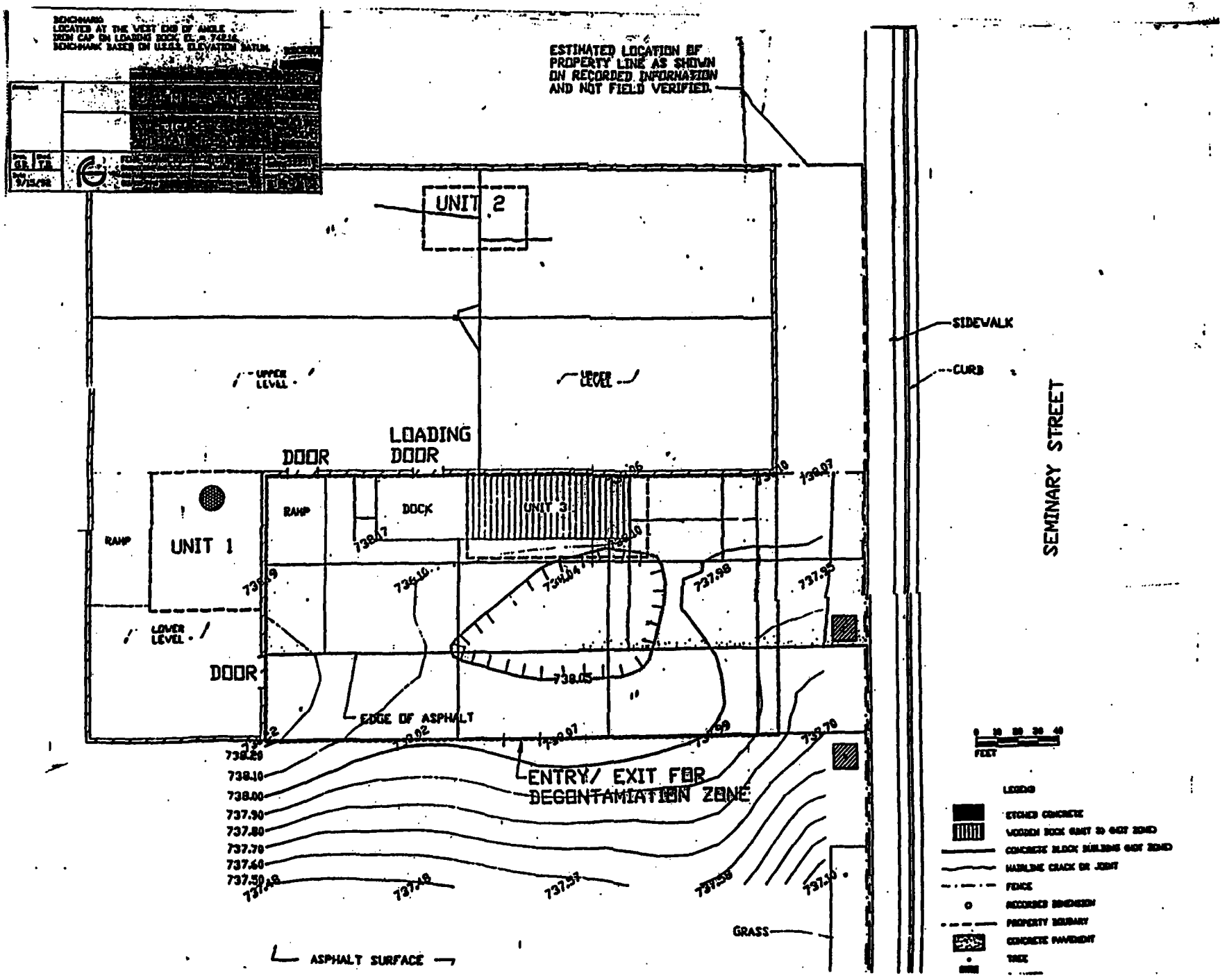
2.) Analysis were performed according to "Standard Methods", 17th Edition; ASTM latest edition.

Table 2. Soil sampling data from the base of the 1600 gallon UST which had a reported release in 1991(53.)

Map 5: Facility layout with topography data (suspected to be connected with Unit 3 closure)(54.)



Map 6: Close up of topography data (54.)



RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

J&M PLATING

EPA SITE NUMBER: ILD990783995

ROCKFORD, IL

SCORED BY: KEVIN HIGGINS

OF TECHLAW, INC.

ON 04/17/98

GROUNDWATER SCORE	:	49.30
SURFACE WATER SCORE:		57.61
AIR ROUTE SCORE	:	31.37
ONSITE SCORE	:	85.71

MIGRATION SCORE	:	59.33

WS-1 GROUNDWATER ROUTE

IS THERE AN OBSERVED RELEASE? P

ROUTE CHARACTERISTICS

DEPTH TO AQUIFER (FT.) : 15

NET PRECIPITATION (IN.) : 2

PHYSICAL STATE: LIQUID, GAS, SLUDGE

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: CADMIUM

TOXICITY/PERSISTANCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE LARGE

TARGETS

GROUNDWATER USE: AGRICULTURE OR INDUSTRIAL

DISTANCE TO WELL (MILES): 0.4

EPA ID NO. : ILD990783995
J&M PLATING

WS-2 SURFACE WATER ROUTE

RELEASES

IS THERE AN OBSERVED RELEASE? Y

IS THERE A PERMITTED OUTFALL?

HAVE THERE BEEN PERMIT VIOLATIONS?

ROUTE CHARACTERISTICS

FACILITY LOCATION: NA

24-HOUR RAINFALL: NA

DISTANCE TO SURFACE WATER (MILES): NA

PHYSICAL STATE: NA

CONTAINMENT: NA

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: CADMIUM

TOXICITY/PERSISTANCE VALUE: 18

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE LARGE

TARGETS

SURFACE WATER USE: POSSIBLE DRINKING WATER OR RECREATION

DISTANCE TO INTAKE OR CONTACT POINT (MILES): 0.3

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 3.0

WS-3 AIR ROUTE

RELEASES

IS THERE AN OBSERVED, UNPERMITTED, ON-GOING RELEASE? N

DOES THE FACILITY HAVE AN AIR OPERATING PERMIT(S)? Y

HAVE THERE BEEN ANY PERMIT VIOLATIONS OR ODOR COMPLAINTS BY RESIDENTS? Y

CAN CONTAMINANTS MIGRATE INTO AIR? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: CADMIUM

TOXICITY/PERSISTANCE VALUE: 3

QUANTITY KNOWN? NO

CUBIC YARDS OR TONS: 0
DRUMS : 0

AMOUNT IS LIKELY TO BE SMALL

TARGETS

POPULATION: RESIDENCES ARE LOCATED WITHIN FOUR MILES

DISTANCE TO SENSITIVE ENVIRONMENT (MILES): 0.4

EPA ID NO. : ILD990783995
J&M PLATING

WS-4 ON SITE CONTAMINATION

ACCESS TO SITE: UNLIMITED ACCESS

IS THERE AN OBSERVED SURFACE SOIL CONTAMINATION? Y

CONTAINMENT: POOR

WASTE CHARACTERISTICS

CHEMICAL NAME OR WASTE CODE NUMBER: CADMIUM

TOXICITY/PERSISTANCE VALUE: 3

TARGETS

DISTANCE TO RESIDENTIAL AREAS (MILES): 0.15

IS THERE AN ON-SITE SENSITIVE ENVIRONMENT: N